Jeffries, Dawn (DEQ)

From: Jeffries, Dawn (DEQ)
Sent: Friday, December 04, 2015 11:11 AM
To: 'Jean Andrews'
Subject: Stuarts Draft WWTP, VPDES Permit No. VA0066877, Augusta County

Dear Ms. Andrews:

Your application has been reviewed and appears to be complete. The next steps involve assembling the information necessary to develop the permit limitations and then drafting the permit. Once the draft permit is prepared and the appropriate reviews are performed, I will transmit the draft permit and supporting documentation to you for review. I expect to have this draft permit package to you within the next 3 months.

The Department of Environmental Quality strives to complete the permitting process in a timely manner. If you have any questions about our procedures or the status of your draft permit, please do not hesitate to contact us.

Sincerely,
Dawn Jeffries
VA Dept. of Environmental Quality
Valley Regional Office
P.O. Box 3000
Harrisonburg, Virginia 22801
540-574-7898
dawn.jeffries@deq.virginia.gov

MEMORANDUM

DEPARTMENT OF ENVIRONMENTAL QUALITY

VALLEY REGIONAL OFFICE

4411 Early Road - P.O. Box 3000 Harrisonburg, VA 22801

SUBJECT: Application Errata for VPDES Permit No. VA0066877, Stuarts Draft WWTP, Augusta County

TO: PP File

FROM: Dawn Jeffries

DATE: December 3, 2015

The following deficiencies were noted in the subject permit reissuance application:

Sewage Sludge Application Form Addendum
Part 1 Item 6.b. – Based on information on file at DEQ-VRO, it is known that Houff's Feed & Fertilizer is authorized to land apply Class B biosolids from the Stuarts Draft WWTP under VPA Permit No. VPA01566, VPA01580, and VPA01581.

Part 2 Item 2. – Based on information on file at DEQ-VRO, it is known that the receiving facility utilizes fecal coliform monitoring to demonstrate compliance with the pathogen reduction requirements.

The deficiencies noted are insignificant and will not affect the preparation of a legally and technically defensible draft permit.

Reviewer Concurrence: BWC 12.4.15

AUGUSTA COUNTY SERVICE AUTHORITY

18 GOVERNMENT CENTER LANE, P.O. BOX 859, VERONA, VIRGINIA 24482 (540) 245-5670 FAX: (540) 245-5684

November 24, 2015

Ms. Dawn Jeffries
Environmental Engineer
Department of Environmental Quality
P. O. Box 3000
Harrisonburg, VA 22801-3000

RE: Stuarts Draft Permit Application (VA0066877)

Dear Ms. Jeffries:

Enclosed is the original permit renewal application for the Stuarts Draft Wastewater Treatment Plant.

The Augusta County Service Authority submitted E Coli data in lieu of fecal coliform data on Part 2A, Section A12. The Water Quality Standards now specify E coli to be tested in lieu of fecal coliform.

The Augusta County Service Authority is requesting reduced monitoring for BOD, TSS, Ammonia, and E coli for the next permit cycle. With regards to the Industrial Pretreatment Program, no new significant industrial users have been permitted for this system.

If you have any questions, please contact me at (540) 245-5677.

Sincerely,

Jean Andrews

Jean E. Andrews
Lab and Compliance Manager

/ja
Enclosures

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART A. BASIC APPLICATION INFORMATION FOR ALL APPLICANTS:

All treatment works must complete questions A.1 through A.8 of this Basic Application information packet.

A.1. Facility Information.

Facility name: Stuarts Draft WWTP

Mailing Address: PO Box 859
Verona VA 24482

Contact person: Ken Fanfoni

Title: Executive Director

Telephone number: (540) 245-5670

Facility Address (not P.O. Box): 391 Wayne Avenue
Stuarts Draft VA 24477

A.2. Applicant Information. If the applicant is different from the above, provide the following:

Applicant name:

Mailing Address:

Contact person:

Title:

Telephone number:

Is the applicant the owner or operator (or both) of the treatment works?

✓ owner ✓ operator

Indicate whether correspondence regarding this permit should be directed to the facility or the applicant.

_____ facility ✓ applicant

A.3. Existing Environmental Permits. Provide the permit number of any existing environmental permits that have been issued to the treatment works (include state-issued permits).

NPDES VA0066877
UIC
RCRA
PSD
Other VAN010092
Other VAL066877

A.4. Collection System Information. Provide information on municipalities and areas served by the facility. Provide the name and population of each entity and, if known, provide information on the type of collection system (combined vs. separate) and its ownership (municipal, private, etc.).

Name	Population Served	Type of Collection System	Ownership
Stuarts Draft	5,815	Separate	Municipal

Total population served 5,815

A.5. Indian Country.

a. Is the treatment works located in Indian Country?

____ Yes ✓ No

b. Does the treatment works discharge to a receiving water that is either in Indian Country or that is upstream from (and eventually flows through) Indian Country?

____ Yes ✓ No

A.6. Flow. Indicate the design flow rate of the treatment plant (i.e., the wastewater flow rate that the plant was built to handle). Also provide the average daily flow rate and maximum daily flow rate for each of the last three years. Each year's data must be based on a 12-month time period with the 12th month of "this year" occurring no more than three months prior to this application submittal.

a. Design flow rate 4.0 mgd

	Two Years Ago	Last Year	This Year	
b. Annual average daily flow rate	1.086	1.203	0.944	mgd
c. Maximum daily flow rate	4.870	3.802	2.909	mgd

A.7. Collection System. Indicate the type(s) of collection system(s) used by the treatment plant. Check all that apply. Also estimate the percent contribution (by miles) of each.

✓ Separate sanitary sewer	100 %
____ Combined storm and sanitary sewer	____ %

A.8. Discharges and Other Disposal Methods.

a. Does the treatment works discharge effluent to waters of the U.S.? ✓ Yes ____ No

If yes, list how many of each of the following types of discharge points the treatment works uses:

i. Discharges of treated effluent 1
ii. Discharges of untreated or partially treated effluent 0
iii. Combined sewer overflow points 0
iv. Constructed emergency overflows (prior to the headworks) 0
v. Other ____

b. Does the treatment works discharge effluent to basins, ponds, or other surface impoundments that do not have outlets for discharge to waters of the U.S.? ____ Yes ✓ No

If yes, provide the following for each surface impoundment:

Location: ____

Annual average daily volume discharged to surface impoundment(s) ____ mgd

Is discharge ____ continuous or ____ intermittent?

c. Does the treatment works land-apply treated wastewater? ____ Yes ✓ No

If yes, provide the following for each land application site:

Location: ____

Number of acres: ____

Annual average daily volume applied to site: ____ Mgd

Is land application ____ continuous or ____ intermittent?

d. Does the treatment works discharge or transport treated or untreated wastewater to another treatment works? ____ Yes ✓ No

If yes, describe the mean(s) by which the wastewater from the treatment works is discharged or transported to the other treatment works (e.g., tank truck, pipe).

If transport is by a party other than the applicant, provide:

Transporter name:

Mailing Address:

Contact person:

Title:

Telephone number:

For each treatment works that receives this discharge, provide the following:

Name:

Mailing Address:

Contact person:

Title:

Telephone number:

If known, provide the NPDES permit number of the treatment works that receives this discharge.

Provide the average daily flow rate from the treatment works into the receiving facility. NA mgd

e. Does the treatment works discharge or dispose of its wastewater in a manner not included in A.8.a through A.8.d above (e.g., underground percolation, well injection)? ____ Yes ✓ No

If yes, provide the following for each disposal method:

Description of method (including location and size of site(s) if applicable):

Annual daily volume disposed of by this method:

Is disposal through this method ____ continuous or ____ intermittent?

WASTEWATER DISCHARGES:

If you answered "yes" to question A.8.a, complete questions A.9 through A.12 **once for each outfall** (including bypass points) through which effluent is discharged. Do not include information on combined sewer overflows in this section. **If you answered "no" to question A.8.a**, go to Part B, "Additional Application Information for Applicants with a Design Flow Greater than or Equal to 0.1 mgd."

A.9. Description of Outfall.

a. Outfall number 001

b. Location
Stuarts Draft (City or town, if applicable) — 24477 (Zip Code)
Augusta (County) — VA (State)
38° 01' 08.9" (Latitude) — 79° 01' 00.7" (Longitude)

c. Distance from shore (if applicable) _____ ft.

d. Depth below surface (if applicable) _____ ft.

e. Average daily flow rate 0.944 mgd

f. Does this outfall have either an intermittent or a periodic discharge? _____ Yes ✓ No (go to A.9.g.)

If yes, provide the following information:

Number of times per year discharge occurs: _____

Average duration of each discharge: _____

Average flow per discharge: _____ mgd

Months in which discharge occurs: _____

g. Is outfall equipped with a diffuser? _____ Yes ✓ No

A.10. Description of Receiving Waters.

a. Name of receiving water South River

b. Name of watershed (if known) Potomac Basin, Shenandoah Subbasin

United States Soil Conservation Service 14-digit watershed code (if known): _____

c. Name of State Management/River Basin (if known): _____

United States Geological Survey 8-digit hydrologic cataloging unit code (if known): _____

d. Critical low flow of receiving stream (if applicable):
acute _____ cfs chronic _____ cfs

e. Total hardness of receiving stream at critical low flow (if applicable): _____ mg/l of $CaCO_3$

FACILITY NAME AND PERMIT NUMBER:
Stuarts Draft WWTP VA0066877

Form Approved 1/14/99
OMB Number 2040-0086

A.11. Description of Treatment.

a. What levels of treatment are provided? Check all that apply.

_____ Primary ✓ Secondary

✓ Advanced _____ Other. Describe: _____

b. Indicate the following removal rates (as applicable):

Design BOD_5 removal or Design $CBOD_5$ removal	95	%
Design SS removal	95	%
Design P removal	92	%
Design N removal	88	%
Other _____	_____	%

c. What type of disinfection is used for the effluent from this outfall? If disinfection varies by season, please describe.

UV

If disinfection is by chlorination, is dechlorination used for this outfall? _____ Yes _____ No

d. Does the treatment plant have post aeration? ✓ Yes _____ No

A.12. Effluent Testing Information. All Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three samples and must be no more than four and one-half years apart.

Outfall number: 001

PARAMETER	MAXIMUM DAILY VALUE		AVERAGE DAILY VALUE		
	Value	Units	Value	Units	Number of Samples
pH (Minimum)	6.9	s.u.			
pH (Maximum)	8.4	s.u.			
Flow Rate	4.870	MGD	1.078	MGD	1095
Temperature (Winter)	18	° C	12	° C	543
Temperature (Summer)	25	° C	21	° C	552

* For pH please report a minimum and a maximum daily value

POLLUTANT		MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
		Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.								
BIOCHEMICAL OXYGEN	BOD-5	12	mg/L	<2	mg/L	326	SM 5210B	2 mg/L
DEMAND (Report one)	CBOD-5							
FECAL COLIFORM		118 (E.coli)	n/cml	2 (E.coli)	n/cml	469	Idexx	1 n/cml
TOTAL SUSPENDED SOLIDS (TSS)		1.7	mg/L	<1.0	mg/L	37	SM 2540D	1.0 mg/L

END OF PART A.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

BASIC APPLICATION INFORMATION

PART B. ADDITIONAL APPLICATION INFORMATION FOR APPLICANTS WITH A DESIGN FLOW GREATER THAN OR EQUAL TO 0.1 MGD (100,000 gallons per day).

All applicants with a design flow rate ≥ 0.1 mgd must answer questions B.1 through B.6. All others go to Part C (Certification).

B.1. Inflow and Infiltration. Estimate the average number of gallons per day that flow into the treatment works from inflow and/or infiltration.

176,876 gpd

Briefly explain any steps underway or planned to minimize inflow and infiltration.

ACSA continues to investigate and repair problems as discovered.

B.2. Topographic Map. Attach to this application a topographic map of the area extending at least one mile beyond facility property boundaries. This map must show the outline of the facility and the following information. (You may submit more than one map if one map does not show the entire area.)

a. The area surrounding the treatment plant, including all unit processes.

b. The major pipes or other structures through which wastewater enters the treatment works and the pipes or other structures through which treated wastewater is discharged from the treatment plant. Include outfalls from bypass piping, if applicable.

c. Each well where wastewater from the treatment plant is injected underground.

d. Wells, springs, other surface water bodies, and drinking water wells that are: 1) within 1/4 mile of the property boundaries of the treatment works, and 2) listed in public record or otherwise known to the applicant.

e. Any areas where the sewage sludge produced by the treatment works is stored, treated, or disposed.

f. If the treatment works receives waste that is classified as hazardous under the Resource Conservation and Recovery Act (RCRA) by truck, rail, or special pipe, show on the map where that hazardous waste enters the treatment works and where it is treated, stored, and/or disposed.

B.3. Process Flow Diagram or Schematic. Provide a diagram showing the processes of the treatment plant, including all bypass piping and all backup power sources or redundancy in the system. Also provide a water balance showing all treatment units, including disinfection (e.g, chlorination and dechlorination). The water balance must show daily average flow rates at influent and discharge points and approximate daily flow rates between treatment units. Include a brief narrative description of the diagram.

B.4. Operation/Maintenance Performed by Contractor(s).

Are any operational or maintenance aspects (related to wastewater treatment and effluent quality) of the treatment works the responsibility of a contractor? ___Yes ✓ No

If yes, list the name, address, telephone number, and status of each contractor and describe the contractor's responsibilities (attach additional pages if necessary).

Name:

Mailing Address:

Telephone Number:

Responsibilities of Contractor:

B.5. Scheduled Improvements and Schedules of Implementation. Provide information on any uncompleted implementation schedule or uncompleted plans for improvements that will affect the wastewater treatment, effluent quality, or design capacity of the treatment works. If the treatment works has several different implementation schedules or is planning several improvements, submit separate responses to question B.5 for each. (If none, go to question B.6.)

a. List the outfall number (assigned in question A.9) for each outfall that is covered by this implementation schedule.

b. Indicate whether the planned improvements or implementation schedule are required by local, State, or Federal agencies.

___Yes ___No

c If the answer to B.5.b is "Yes," briefly describe, including new maximum daily inflow rate (if applicable).

_____

d. Provide dates imposed by any compliance schedule or any actual dates of completion for the implementation steps listed below, as applicable. For improvements planned independently of local, State, or Federal agencies, indicate planned or actual completion dates, as applicable. Indicate dates as accurately as possible.

Implementation Stage	Schedule MM / DD / YYYY	Actual Completion MM / DD / YYYY
– Begin construction	___/___/_____	___/___/_____
– End construction	___/___/_____	___/___/_____
– Begin discharge	___/___/_____	___/___/_____
– Attain operational level	___/___/_____	___/___/_____

e. Have appropriate permits/clearances concerning other Federal/State requirements been obtained? ____Yes ____No

Describe briefly: _____

_____

B.6. EFFLUENT TESTING DATA (GREATER THAN 0.1 MGD ONLY).

Applicants that discharge to waters of the US must provide effluent testing data for the following parameters. Provide the indicated effluent testing required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall Number: 001

POLLUTANT	MAXIMUM DAILY DISCHARGE		AVERAGE DAILY DISCHARGE			ANALYTICAL METHOD	ML / MDL
	Conc.	Units	Conc.	Units	Number of Samples		
CONVENTIONAL AND NONCONVENTIONAL COMPOUNDS.							
AMMONIA (as N)	0.38	mg/L	<0.20	mg/L	156	SM 4500-NH3 D	0.20 mg/L
CHLORINE (TOTAL RESIDUAL, TRC)	<0.1	mg/L	<0.1	mg/L	3	Hach 8167	0.1 mg/L
DISSOLVED OXYGEN	12.6	mg/L	9.8	mg/L	1095	SM4500-O G	0.1 mg/L
TOTAL KJELDAHL NITROGEN (TKN)	1.98	mg/L	0.91	mg/L	156	SM 4500-Norg C	0.50 mg/L
NITRATE PLUS NITRITE NITROGEN	5.52	mg/L	1.66	mg/L	156	SM 4500-NO3 F	0.05 mg/L
OIL and GREASE	<5.0	mg/L	<5.0	mg/L	3	EPA 1664 A	5.0 mg/L
PHOSPHORUS (Total)	0.56	mg/L	0.15	mg/L	156	SM 4500-P E	0.05
TOTAL DISSOLVED SOLIDS (TDS)	451	mg/L	396	mg/L	3	SM 2450 C	10 mg/L
OTHER							

END OF PART B.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:
Stuarts Draft WWTP VA0066877

Form Approved 1/14/99
OMB Number 2040-0086

BASIC APPLICATION INFORMATION

PART C. CERTIFICATION

All applicants must complete the Certification Section. Refer to instructions to determine who is an officer for the purposes of this certification. All applicants must complete all applicable sections of Form 2A, as explained in the Application Overview. Indicate below which parts of Form 2A you have completed and are submitting. By signing this certification statement, applicants confirm that they have reviewed Form 2A and have completed all sections that apply to the facility for which this application is submitted.

Indicate which parts of Form 2A you have completed and are submitting:

✓ Basic Application Information packet

Supplemental Application Information packet:

✓ Part D (Expanded Effluent Testing Data)

✓ Part E (Toxicity Testing: Biomonitoring Data)

✓ Part F (Industrial User Discharges and RCRA/CERCLA Wastes)

____ Part G (Combined Sewer Systems)

ALL APPLICANTS MUST COMPLETE THE FOLLOWING CERTIFICATION.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title: Kenneth J. Fanfoni, Executive Director

Signature: Kenneth J Fanfoni

Telephone number: (540) 245-5670

Date signed: 11/20/15

Upon request of the permitting authority, you must submit any other information necessary to assess wastewater treatment practices at the treatment works or identify appropriate permitting requirements.

SEND COMPLETED FORMS TO:

FACILITY NAME AND PERMIT NUMBER:
Stuarts Draft WWTP VA0066877

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SUPPLEMENTAL APPLICATION INFORMATION

PART D. EXPANDED EFFLUENT TESTING DATA

Refer to the directions on the cover page to determine whether this section applies to the treatment works.

Effluent Testing: 1.0 mgd and Pretreatment Treatment Works. If the treatment works has a design flow greater than or equal to 1.0 mgd or it has (or is required to have) a pretreatment program, or is otherwise required by the permitting authority to provide the data, then provide effluent testing data for the following pollutants. Provide the indicated effluent testing information and any other information required by the permitting authority for each outfall through which effluent is discharged. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analyses conducted using 40 CFR Part 136 methods. In addition, these data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136. Indicate in the blank rows provided below any data you may have on pollutants not specifically listed in this form. At a minimum, effluent testing data must be based on at least three pollutant scans and must be no more than four and one-half years old.

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
METALS (TOTAL RECOVERABLE), CYANIDE, PHENOLS, AND HARDNESS.											
ANTIMONY	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	200.7	5
ARSENIC	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	200.7	5
BERYLLIUM	<0.5	ug/L	<0.01	kg/D	<0.5	ug/L	<0.01	kg/D	3	200.7	0.5
CADMIUM	<0.5	ug/L	<0.01	kg/D	<0.5	ug/L	<0.01	kg/D	3	200.7	0.5
CHROMIUM	1	ug/L	0.018	kg/D	0.3	ug/L	0.001	kg/D	3	200.7	1
COPPER	4	ug/L	0.074	kg/D	2.3	ug/L	0.009	kg/D	3	200.7	2
LEAD	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	200.7	5
MERCURY	<0.2	ug/L	<0.01	kg/D	<0.2	ug/L	<0.01	kg/D	3	245.1	0.2
NICKEL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	200.7	5
SELENIUM	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	200.7	5
SILVER	<1	ug/L	<0.02	kg/D	<1	ug/L	<0.01	kg/D	3	200.7	1
THALLIUM	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	200.7	5
ZINC	80.0	ug/L	1.47	kg/D	52.3	ug/L	0.21	kg/D	3	200.7	5
CYANIDE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	335.4	5
TOTAL PHENOLIC COMPOUNDS	30	ug/L	0.55	kg/D	10	ug/L	0.04	kg/D	3	420.4	20
HARDNESS (AS $CaCO_3$)	125	mg/L	2304	kg/D	114	mg/L	465	kg/D	3	2340B	0.331
Use this space (or a separate sheet) to provide information on other metals requested by the permit writer.											

FACILITY NAME AND PERMIT NUMBER:
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Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
VOLATILE ORGANIC COMPOUNDS.											
ACROLEIN	<50	ug/L	<0.92	kg/D	<50	ug/L	<0.20	kg/D	3	624	50
ACRYLONITRILE	<50	ug/L	<0.92	kg/D	<50	ug/L	<0.20	kg/D	3	624	50
BENZENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
BROMOFORM	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
CARBON TETRACHLORIDE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
CLOROBENZENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
CHLORODIBROMO-METHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
CHLOROETHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
2-CHLORO-ETHYLVINYL ETHER	<10	ug/L	<0.18	kg/D	<10	ug/L	<0.04	kg/D	3	624	10
CHLOROFORM	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
DICHLOROBROMO-METHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
1,1-DICHLOROETHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
1,2-DICHLOROETHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
TRANS-1,2-DICHLORO-ETHYLENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
1,1-DICHLOROETHYLENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
1,2-DICHLOROPROPANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
1,3-DICHLORO-PROPYLENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
ETHYLBENZENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
METHYL BROMIDE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
METHYL CHLORIDE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
METHYLENE CHLORIDE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
1,1,2,2-TETRACHLORO-ETHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
TETRACHLORO-ETHYLENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
TOLUENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5

FACILITY NAME AND PERMIT NUMBER:
Stuarts Draft WWTP VA0066877

Form Approved 1/14/99
OMB Number 2040-0086

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
1,1,1-TRICHLOROETHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
1,1,2-TRICHLOROETHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
TRICHLORETHYLENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
VINYL CHLORIDE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
Use this space (or a separate sheet) to provide information on other volatile organic compounds requested by the permit writer.											
ACID-EXTRACTABLE COMPOUNDS											
P-CHLORO-M-CRESOL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
2-CHLOROPHENOL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
2,4-DICHLOROPHENOL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
2,4-DIMETHYLPHENOL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
4,6-DINITRO-O-CRESOL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
2,4-DINITROPHENOL	<20	ug/L	<0.37	kg/D	<20	ug/L	<0.08	kg/D	3	625	20
2-NITROPHENOL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
4-NITROPHENOL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
PENTACHLOROPHENOL	<10	ug/L	<0.18	kg/D	<10	ug/L	<0.04	kg/D	3	625	10
PHENOL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
2,4,6-TRICHLOROPHENOL	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
Use this space (or a separate sheet) to provide information on other acid-extractable compounds requested by the permit writer.											
BASE-NEUTRAL COMPOUNDS.											
ACENAPHTHENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
ACENAPHTHYLENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
ANTHRACENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BENZIDINE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BENZO(A)ANTHRACENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BENZO(A)PYRENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5

FACILITY NAME AND PERMIT NUMBER:
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Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
3,4 BENZO-FLUORANTHENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BENZO(GHI)PERYLENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BENZO(K)FLUORANTHENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BIS (2-CHLOROETHOXY) METHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BIS (2-CHLOROETHYL)-ETHER	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BIS (2-CHLOROISO-PROPYL) ETHER	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BIS (2-ETHYLHEXYL) PHTHALATE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
4-BROMOPHENYL PHENYL ETHER	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
BUTYL BENZYL PHTHALATE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
2-CHLORONAPHTHALENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
4-CHLORPHENYL PHENYL ETHER	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
CHRYSENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
DI-N-BUTYL PHTHALATE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
DI-N-OCTYL PHTHALATE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
DIBENZO(A,H) ANTHRACENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
1,2-DICHLOROBENZENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
1,3-DICHLOROBENZENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
1,4-DICHLOROBENZENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	624	5
3,3-DICHLOROBENZIDINE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
DIETHYL PHTHALATE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
DIMETHYL PHTHALATE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
2,4-DINITROTOLUENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
2,6-DINITROTOLUENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
1,2-DIPHENYLHYDRAZINE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5

Outfall number: 001 (Complete once for each outfall discharging effluent to waters of the United States.)

POLLUTANT	MAXIMUM DAILY DISCHARGE				AVERAGE DAILY DISCHARGE					ANALYTICAL METHOD	ML/ MDL
	Conc.	Units	Mass	Units	Conc.	Units	Mass	Units	Number of Samples		
FLUORANTHENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
FLUORENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
HEXACHLOROBENZENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
HEXACHLOROBUTADIENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
HEXACHLOROCYCLO-PENTADIENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
HEXACHLOROETHANE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
INDENO(1,2,3-CD)PYRENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
ISOPHORONE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
NAPHTHALENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
NITROBENZENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
N-NITROSODI-N-PROPYLAMINE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
N-NITROSODI- METHYLAMINE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
N-NITROSODI-PHENYLAMINE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
PHENANTHRENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
PYRENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
1,2,4-TRICHLOROBENZENE	<5	ug/L	<0.09	kg/D	<5	ug/L	<0.02	kg/D	3	625	5
Use this space (or a separate sheet) to provide information on other base-neutral compounds requested by the permit writer.											
Use this space (or a separate sheet) to provide information on other pollutants (e.g., pesticides) requested by the permit writer.											

END OF PART D.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART E. TOXICITY TESTING DATA

POTWs meeting one or more of the following criteria must provide the results of whole effluent toxicity tests for acute or chronic toxicity for each of the facility's discharge points: 1) POTWs with a design flow rate greater than or equal to 1.0 mgd; 2) POTWs with a pretreatment program (or those that are required to have one under 40 CFR Part 403); or 3) POTWs required by the permitting authority to submit data for these parameters:

- At a minimum, these results must include quarterly testing for a 12-month period within the past 1 year using multiple species (minimum of two species), or the results from four tests performed at least annually in the four and one-half years prior to the application, provided the results show no appreciable toxicity, and testing for acute and/or chronic toxicity, depending on the range of receiving water dilution. Do not include information on combined sewer overflows in this section. All information reported must be based on data collected through analysis conducted using 40 CFR Part 136 methods. In addition, this data must comply with QA/QC requirements of 40 CFR Part 136 and other appropriate QA/QC requirements for standard methods for analytes not addressed by 40 CFR Part 136.
- In addition, submit the results of any other whole effluent toxicity tests from the past four and one-half years. If a whole effluent toxicity test conducted during the past four and one-half years revealed toxicity, provide any information on the cause of the toxicity or any results of a toxicity reduction evaluation, if one was conducted.
- If you have already submitted any of the information requested in Part E, you need not submit it again. Rather, provide the information requested in question E.4 for previously submitted information. If EPA methods were not used, report the reasons for using alternate methods. If test summaries are available that contain all of the information requested below, they may be submitted in place of Part E.

If no biomonitoring data is required, do not complete Part E. Refer to the Application Overview for directions on which other sections of the form to complete.

E.1. Required Tests.

Indicate the number of whole effluent toxicity tests conducted in the past four and one-half years.

____chronic ____acute

E.2. Individual Test Data. Complete the following chart for each whole effluent toxicity test conducted in the last four and one-half years. Allow one column per test (where each species constitutes a test). Copy this page if more than three tests are being reported.

	Test number:_____	Test number:_____	Test number:_____
a. Test information.			
Test species & test method number			
Age at initiation of test			
Outfall number			
Dates sample collected			
Date test started			
Duration			
b. Give toxicity test methods followed.			
Manual title			
Edition number and year of publication			
Page number(s)			
c. Give the sample collection method(s) used. For multiple grab samples, indicate the number of grab samples used.			
24-Hour composite			
Grab			
d. Indicate where the sample was taken in relation to disinfection. (Check all that apply for each)			
Before disinfection			
After disinfection			
After dechlorination			

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	Test number:_____	Test number:_____	Test number:_____
e. Describe the point in the treatment process at which the sample was collected.			
Sample was collected:			
f. For each test, include whether the test was intended to assess chronic toxicity, acute toxicity, or both.			
Chronic toxicity			
Acute toxicity			
g. Provide the type of test performed.			
Static			
Static-renewal			
Flow-through			
h. Source of dilution water. If laboratory water, specify type; if receiving water, specify source.			
Laboratory water			
Receiving water			
i. Type of dilution water. If salt water, specify "natural" or type of artificial sea salts or brine used.			
Fresh water			
Salt water			
j. Give the percentage effluent used for all concentrations in the test series.			
k. Parameters measured during the test. (State whether parameter meets test method specifications)			
pH			
Salinity			
Temperature			
Ammonia			
Dissolved oxygen			
l. Test Results.			
Acute:			
Percent survival in 100% effluent	%	%	%
LC_{50}			
95% C.I.	%	%	%
Control percent survival	%	%	%
Other (describe)			

Chronic:			
NOEC	%	%	%
IC_{25}	%	%	%
Control percent survival	%	%	%
Other (describe)			

m. Quality Control/Quality Assurance.

Is reference toxicant data available?			
Was reference toxicant test within acceptable bounds?			
What date was reference toxicant test run (MM/DD/YYYY)?			
Other (describe)			

E.3. Toxicity Reduction Evaluation. Is the treatment works involved in a Toxicity Reduction Evaluation?

___Yes ✓ No If yes, describe: _____

E.4. Summary of Submitted Biomonitoring Test Information. If you have submitted biomonitoring test information, or information regarding the cause of toxicity, within the past four and one-half years, provide the dates the information was submitted to the permitting authority and a summary of the results.

Date submitted: _____ (MM/DD/YYYY)

Summary of results: (see instructions)

Spreadsheet is attached

END OF PART E.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE.

STUARTS DRAFT WWTP TOXICITY MONITORING REPORT RESULTS

Date	Report Type	Acute (LC50)				Chronic (NOEC) (IWC = 41%) as of 3/03									
		Ceriodaphnia dubia	C. dubia Survival TUa	Pimephales promelas	P. promelas Survival TUa	Ceriodaphnia dubia					Pimephales promelas				
						Survival	Survival TUc	Reprod.	Reprod TUc	Reprod IC_{25}	Survival	Survival TUc	Growth	Growth TUc	Growth IC_{25}
January 30 - February 2, 2012	Quarterly	>100%	1.00	>100%	1.00	100%	N/A	100%	<1.00	>100	100%	1.00	100%	1.00	>100%
January 30 - February 2, 2012	Quarterly (treated)**	-	-	-	-	-	-	-	-	-	100%	N/A	100%	<1.00	>100%
May 13 - 16, 2013	Annual	>100%	1.00	>100%	1.00	100%	N/A	100%	<1.00	>100	100%	1.00	100%	1.00	>100%
May 13 - 16, 2013	Annual (treated)**	-	-	-	-	-	-	-	-	-	100%	N/A	100%	<1.00	>100%
June 2 - 5, 2014	Annual (treated)**	>100%	1.00	>100%	1.00	100%	N/A	100%	<1.00	>100	100%	N/A	100%	<1.00	>100%
August 3 - 6, 2015	Annual (treated)**	>100%	1.00	>100%	1.00	100%	N/A	100%	<1.00	>100	100%	N/A	100%	<1.00	>100%

Annual Tests: 4 MGD flow tier

Acute LC50 of 100%, equivalent to 1.0 TUa
Chronic NOEC of 94.1%, equivalent to 1.06 TUc

* Possible pathogen interference
** Additional UV irradiation (20 minutes) was performed on this sample.

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

✓ Yes ___ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 2

b. Number of CIUs. 1

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: McKee Foods Corporation

Mailing Address: PO Box 486
Stuarts Draft, VA 24477

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Bakery

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Snack cakes and cookies

Raw material(s): Corn syrup, salad oil, sugar, flour, shortenings

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

49,900 gpd (✓ continuous or ___ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

20,500 gpd (✓ continuous or ___ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ___ Yes ✓ No

If subject to categorical pretreatment standards, which category and subcategory?

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes ✓ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ____Yes ✓ No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) ✓ No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

✓ Yes ___ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. 2

b. Number of CIUs. 1

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Hershey Chocolate of Virginia

Mailing Address: 120 Harold Cook Drive
Stuarts Draft, VA 24477

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Confectionery Manufacturing

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Candy

Raw material(s): Corn Syrup, Sugar, Chocolate, Peanut Oil

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

98,000 gpd (✓ continuous or ___ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

31,700 gpd (✓ continuous or ___ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ___ Yes ✓ No

If subject to categorical pretreatment standards, which category and subcategory?

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes ✓ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ____Yes ___No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) ____No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE

FACILITY NAME AND PERMIT NUMBER:

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SUPPLEMENTAL APPLICATION INFORMATION

PART F. INDUSTRIAL USER DISCHARGES AND RCRA/CERCLA WASTES

All treatment works receiving discharges from significant industrial users or which receive RCRA, CERCLA, or other remedial wastes must complete Part F.

GENERAL INFORMATION:

F.1. Pretreatment Program. Does the treatment works have, or is it subject to, an approved pretreatment program?

✓ Yes ___ No

F.2. Number of Significant Industrial Users (SIUs) and Categorical Industrial Users (CIUs). Provide the number of each of the following types of industrial users that discharge to the treatment works.

a. Number of non-categorical SIUs. _____

b. Number of CIUs. _____

SIGNIFICANT INDUSTRIAL USER INFORMATION:

Supply the following information for each SIU. If more than one SIU discharges to the treatment works, copy questions F.3 through F.8 and provide the information requested for each SIU.

F.3. Significant Industrial User Information. Provide the name and address of each SIU discharging to the treatment works. Submit additional pages as necessary.

Name: Nibco of Virginia, Incorporated

Mailing Address: 131 Johnson Drive
Stuarts Draft, VA 24477

F.4. Industrial Processes. Describe all of the industrial processes that affect or contribute to the SIU's discharge.

Copper plumbing fittings manufacturer, including foundry

F.5. Principal Product(s) and Raw Material(s). Describe all of the principal processes and raw materials that affect or contribute to the SIU's discharge.

Principal product(s): Copper Fittings

Raw material(s): Copper

F.6. Flow Rate.

a. Process wastewater flow rate. Indicate the average daily volume of process wastewater discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

11,000 gpd (✓ continuous or ___ intermittent)

b. Non-process wastewater flow rate. Indicate the average daily volume of non-process wastewater flow discharged into the collection system in gallons per day (gpd) and whether the discharge is continuous or intermittent.

10,300 gpd (✓ continuous or ___ intermittent)

F.7. Pretreatment Standards. Indicate whether the SIU is subject to the following:

a. Local limits ✓ Yes ___ No

b. Categorical pretreatment standards ✓ Yes ___ No

If subject to categorical pretreatment standards, which category and subcategory?

Part 468 Subpart A

FACILITY NAME AND PERMIT NUMBER:

Form Approved 1/14/99
OMB Number 2040-0086

F.8. Problems at the Treatment Works Attributed to Waste Discharged by the SIU. Has the SIU caused or contributed to any problems (e.g., upsets, interference) at the treatment works in the past three years?

____Yes ✓ No If yes, describe each episode.

RCRA HAZARDOUS WASTE RECEIVED BY TRUCK, RAIL, OR DEDICATED PIPELINE:

F.9. RCRA Waste. Does the treatment works receive or has it in the past three years received RCRA hazardous waste by truck, rail, or dedicated pipe? ____Yes ___No (go to F.12.)

F.10. Waste Transport. Method by which RCRA waste is received (check all that apply):

_____Truck _____Rail _____Dedicated Pipe

F.11. Waste Description. Give EPA hazardous waste number and amount (volume or mass, specify units).

EPA Hazardous Waste Number	Amount	Units

CERCLA (SUPERFUND) WASTEWATER, RCRA REMEDIATION/CORRECTIVE ACTION WASTEWATER, AND OTHER REMEDIAL ACTIVITY WASTEWATER:

F.12. Remediation Waste. Does the treatment works currently (or has it been notified that it will) receive waste from remedial activities?

____Yes (complete F.13 through F.15.) ____No

Provide a list of sites and the requested information (F.13 - F.15.) for each current and future site.

F.13. Waste Origin. Describe the site and type of facility at which the CERCLA/RCRA/or other remedial waste originates (or is expected to originate in the next five years).

F.14. Pollutants. List the hazardous constituents that are received (or are expected to be received). Include data on volume and concentration, if known. (Attach additional sheets if necessary).

F.15. Waste Treatment.

a. Is this waste treated (or will it be treated) prior to entering the treatment works?

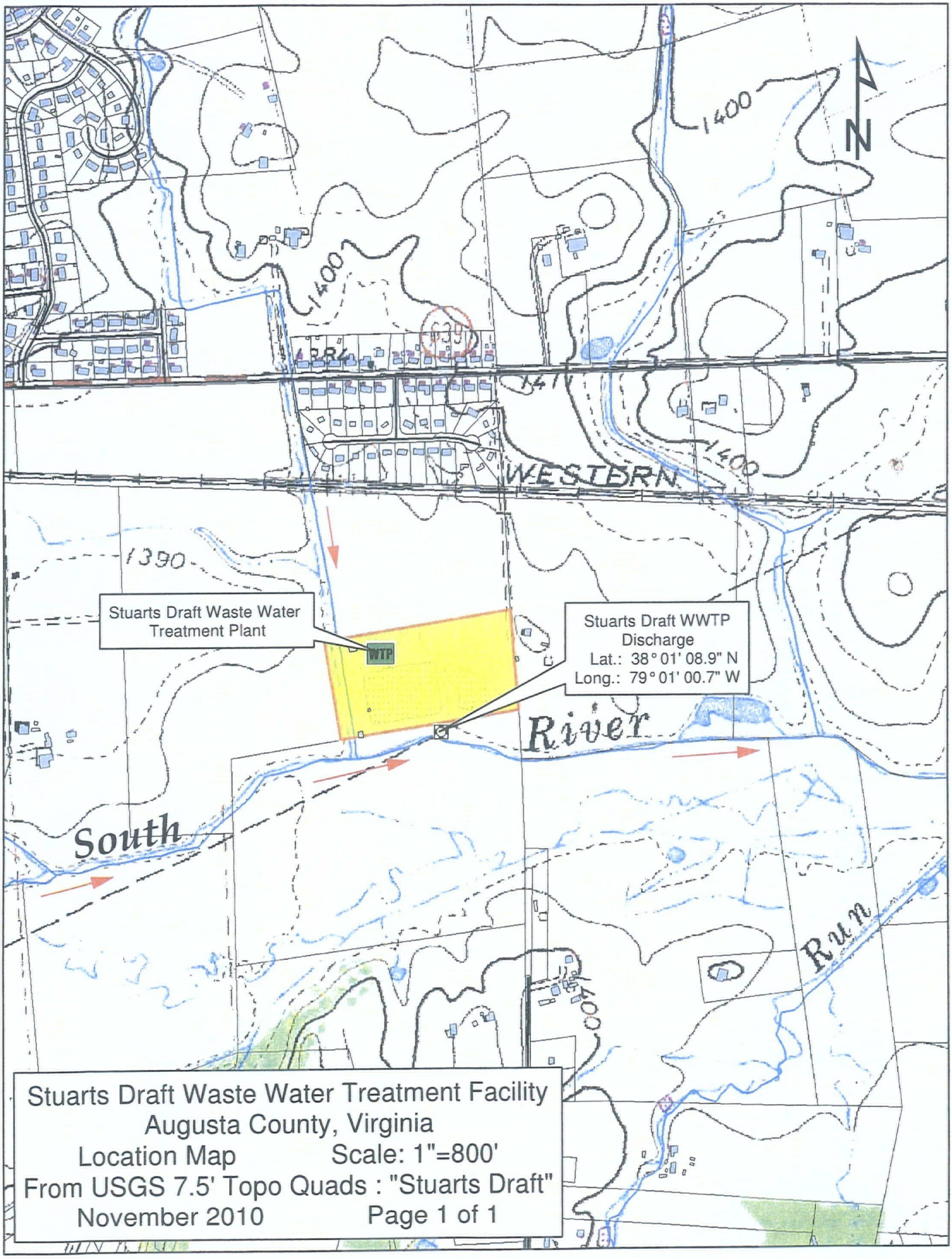
____Yes ____No

If yes, describe the treatment (provide information about the removal efficiency):

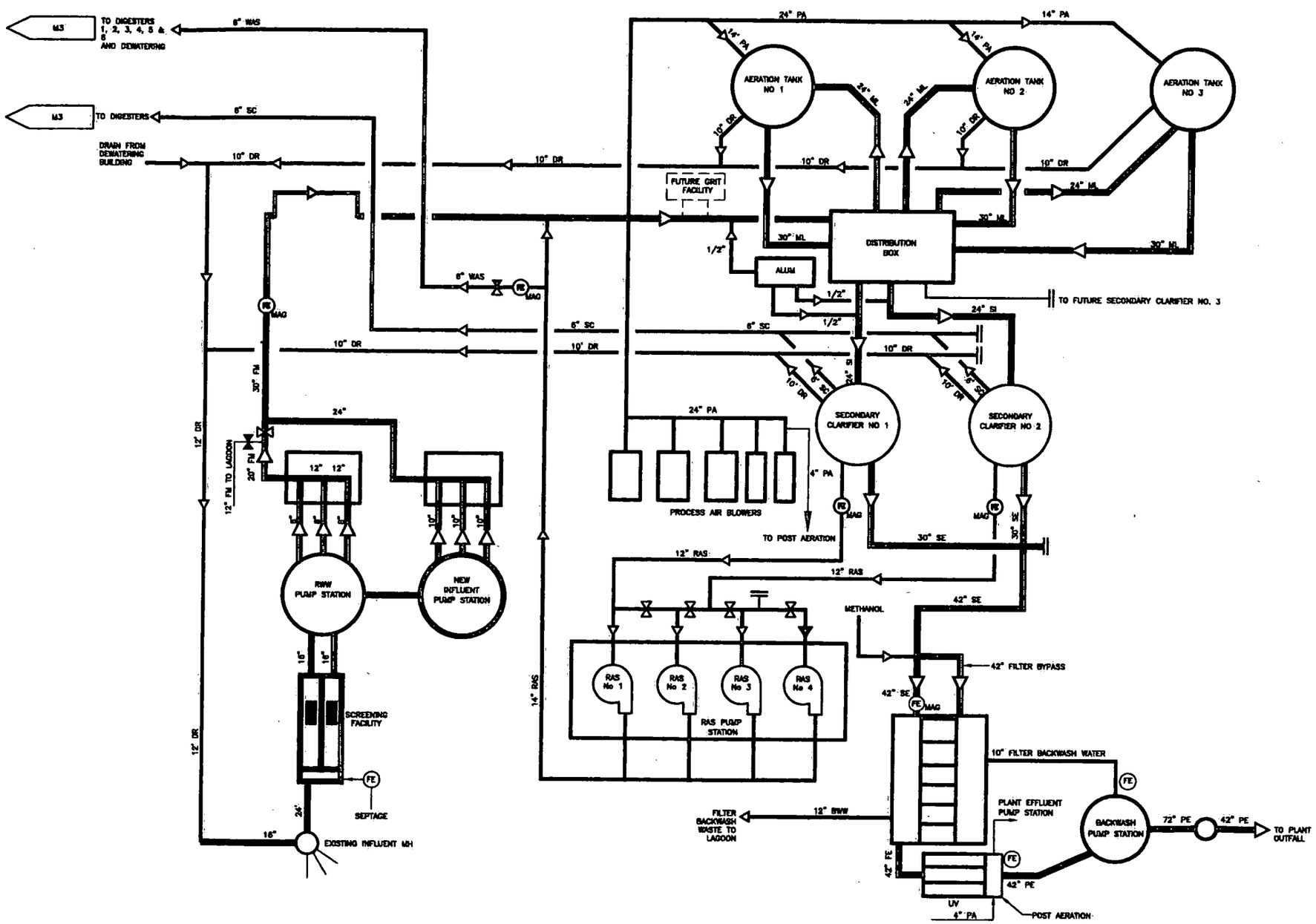
b. Is the discharge (or will the discharge be) continuous or intermittent?

____Continuous ____Intermittent If intermittent, describe discharge schedule.

END OF PART F.
REFER TO THE APPLICATION OVERVIEW TO DETERMINE WHICH OTHER PARTS OF FORM 2A YOU MUST COMPLETE



Stuarts Draft Waste Water Treatment Facility
Augusta County, Virginia
Location Map Scale: 1"=800'
From USGS 7.5' Topo Quads : "Stuarts Draft"
November 2010 Page 1 of 1



REV. NO.	DATE	DRWN	CHKD	REMARKS

DESIGNED BY: P. LOOMIS
DRAWN BY: J. ROSA
SHEET CHK'D BY:
CROSS CHK'D BY:
APPROVED BY:
DATE: JUNE 2009

CDM
Camp Dresser & McKee Inc.
2130 Fairview Park Drive, Suite 400
Falls Church, VA 22043
Tel: (703) 698-8888
consulting • engineering • construction • operations

AUGUSTA COUNTY SERVICE AUTHORITY
VERONA, VIRGINIA

STUARTS DRAFT WWTP EXPANSION

PROCESS FLOW SCHEMATIC

PROJECT NO. 5000-59620
FILE NAME: GPROCSFD

SHEET NO.
G-4

VPDES Sewage Sludge Permit Application for Permit Reissuance

Instructions

WHO MUST SUBMIT THE APPLICATION - All facilities with a current VPDES Permit that authorizes the discharge of treated sewage wastewater that are applying for reissuance must complete and submit this application.
Part 1 is general information to be provided by all facilities.
Part 2 must be completed by all facilities that generate Class A or Class B biosolids that are land applied.
Part 3 must be completed by all facilities that land apply Class B biosolids.

Part 1 – Sludge Disposal Management (To be completed by all facilities)

Facility Name: Stuarts Draft WWTP **VPDES Permit No:** VA0066877

1. **Shipment Off Site for Treatment or Blending**

Is sewage sludge from your facility sent to another facility that provides treatment or blending? ☑ Yes ☐ No

If you send sewage sludge to more than one facility, attach additional sheets as necessary.

Shipment off site is: ☐ The primary method of sludge disposal ☑ A back up method of sludge disposal

a. Receiving Facility Name: Middle River Regional WWTP or Fishersville Regional WWTP

b. Receiving Facility VPDES Permit No.: VA0064793 or VA0025291

c. Include an acceptance letter from the Receiving Facility.

d. Receiving Facility's ultimate disposal method for sewage sludge: Landfill (primary) or land application (secondary)

2. **Disposal in a Municipal Solid Waste Landfill**

Is sewage sludge from your facility placed in a municipal solid waste landfill? ☑ Yes ☐ No

If sewage sludge is placed on more than one municipal solid waste landfill, attach additional pages as necessary.

Landfilling is: ☑ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Landfill Name: Augusta Regional Landfill

b. Landfill Permit No.: 585

c. Include an acceptance letter from the landfill.

3. **Incineration**

Is sewage sludge from your facility fired in a sewage sludge incinerator? ☐ Yes ☑ No

Incineration is: ☐ The primary method of sludge disposal ☐ A back up method of sludge disposal

a. Do you own or operate all sewage sludge incinerators in which sewage sludge from your facility is fired? ☐ Yes ☐ No

If yes, provide the Air Registration No. _____

If no, complete items b - d for each incinerator that you do not own or operate.

b. Facility Name _____

c. Air Registration No. _____

d. Include an acceptance letter from the Incinerator.

4. **Class A Biosolids**

Do you produce Class A biosolids for land application or distribution and marketing? If yes, complete Part 2. ☐ Yes ☑ No

Are Class A biosolids from your facility land applied in bulk? ☐ Yes ☐ No

Do you sell or give away Class A biosolids in a bag or other container for application to the land? If yes, provide the VDACS certification number? _____ ☐ Yes ☐ No

5. **Class B Biosolids**

Do you produce Class B biosolids? If yes, complete Part 2. ☑ *Yes* ☐ *No*

Are Class B biosolids from your facility land applied land applied under the authorization of this VPDES Permit? If yes, complete Part 3. ☐ *Yes* ☑ *No*

6. **Land Application Under a Separate Permit**

Are biosolids from your facility land applied under the authorization of a permit other than your VPDES Permit? ☑ Yes ☐ No

Biosolids are land applied under the authorization of a ☑ VPA permit ☐ Another VPDES Permit ☐ Out of State

Complete items a - c for each VPA permit authorized to land apply biosolids from your facility.

a. Permittee Name: Houff Feed and Fertilizer

b. Permit No.: VPA01566

c. Include copy of any information you provide to the Receiving VPDES or VPA Permittee to comply with the "notice and necessary information" requirement of 9VAC25-31-530 F.

VPDES Sewage Sludge Permit Application for Permit Reissuance

Part 2 – Biosolids Characterization (To be completed by all facilities that generate biosolids that are land applied.)

1. Have there been changes to sludge treatment processes or storage facilities since the previous permit issuance/reissuance? ☐ Yes ☑ No
2. Do the biosolids generated under this permit that will be land applied meet one of the Class A pathogen requirements in 9VAC25-31-710 A 3 through A 8 or Class B pathogen requirements in 9VAC25-31-710 B 1 through B 4? ☑ Yes ☐ No

   Identify the pathogen reduction option utilized to demonstrate compliance with the pathogen reductions requirements and provide the data that demonstrate compliance with the applicable alternative. Four
3. Do the biosolids generated under this permit that will be land applied meet one of the vector attraction reduction requirements in 9VAC25-31-720 B 1 through B 10? ☑ Yes ☐ No

   Identify the vector attraction reduction option utilized to demonstrate compliance with the vector attraction reductions requirements and provide the data that demonstrate compliance with the applicable alternative. Four
4. Do the biosolids to be land applied meet the ceiling/pollutant concentrations in 9VAC25-31-540 B? ☑ Yes ☐ No
5. Has data from the most recent 3 samples for pH (S.U.), Percent Solids (%), Ammonium Nitrogen (mg/kg), Nitrate Nitrogen (mg/kg), Total Kjeldahl Nitrogen (mg/kg), Total Phosphorus (mg/kg), Total Potassium (mg/kg), Alkalinity as $CaCO_3$ (mg/kg), Arsenic (mg/kg), Cadmium (mg/kg), Copper (mg/kg), Lead (mg/kg), Mercury (mg/kg), Nickel (mg/kg), Selenium (mg/kg), Zinc (mg/kg) been submitted to DEQ? The samples shall be no more than 4½ years old and each sampling date shall be at least 1 month apart. ☑ Yes ☐ No

   If no, provide the data with this application.

Part 3 – Land Application of Class B Biosolids (To be completed by all facilities that land apply Class B biosolids.)

1. Provide to DEQ and to each locality in which biosolids are to be land applied, written evidence of financial responsibility. Evidence of financial responsibility shall be provided in accordance with 9VAC25-31-100 P 9.
2. For each site, provide a properly completed landowner agreement for each landowner, using the most current Land Application Agreement - Biosolids Form (VPDES Sewage Sludge Permit Application Form – Attachment to Section C).
3. Are any new land application fields proposed at this reissuance? ☐ Yes ☐ No

   If yes, contact the DEQ Regional Office for additional submittal requirements.
4. For the currently permitted land application fields, are the previously submitted site booklets, maps and acreage accurate. ☐ Yes ☐ No

   If no, contact the DEQ Regional Office for additional submittal requirements.
5. Does the facility's Biosolids Management Plan on file with DEQ include the following minimum information? ☐ Yes ☐ No
   a. An odor control plan that addresses the abatement of odors resulting from the storage and/or land application of biosolids.
   b. A description of the transport vehicles to be used.
   c. Procedures for biosolids offloading at the land application site including spill prevention, cleanup (including vehicle cleaning), field reclamation, and emergency notification and cleanup measures.
   d. A description of the land application equipment including procedures for calibrating equipment to ensure uniform distribution and appropriate loading rates.
   e. Procedures used to ensure that land application activities address notification requirements, signage requirements, slope restrictions, operation limitations during periods of inclement weather, soil pH requirements, buffer zone requirements, and site restrictions.
   f. Any other information necessary to ensure compliance with the requirements of the Biosolids Program of the VPDES Permit Regulation (9VAC25-31-420 through 720).

Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and Official Title: Kenneth J. Fanfoni, Executive Director

Signature: Kenneth J. Fanfoni

Telephone number / Email: (540) 245-5670 kfanfoni@co.augusta.va.us

Date signed: 11/20/15

(Based on a review of this information, it may be necessary to submit additional information to meet other legal or technical review requirements.)

Jeffries, Dawn (DEQ)

From: Jean Andrews [jandrews@co.augusta.va.us]
Sent: Thursday, December 10, 2015 12:05 PM
To: Jeffries, Dawn (DEQ)
Subject: RE: Stuarts Draft Permit Application, VA0066877

Hi Dawn,

Stuarts Draft produced 179.07 DMT of biosolids in 2014. Let me know if you need anything else.

Jean

From: Jeffries, Dawn (DEQ) [mailto:Dawn.Jeffries@deq.virginia.gov]
Sent: Thursday, December 03, 2015 12:15 PM
To: Jean Andrews
Subject: Stuarts Draft Permit Application, VA0066877

Jean,

I received the application your sent in for this reissuance, and I have just one more question.
What is the tonnage of biosolids at this facility per year?

Thanks!
Dawn

Dawn Jeffries
VA Dept. of Environmental Quality
Valley Regional Office
P.O. Box 3000
Harrisonburg, Virginia 22801
540-574-7898
dawn.jeffries@deq.virginia.gov

AUGUSTA COUNTY SERVICE AUTHORITY

18 GOVERNMENT CENTER LANE, P.O. BOX 859, VERONA, VIRGINIA 24482-0859 PHONE: 540-245-5670 FAX: 540-245-5684

October 1, 2015

Ms. Jean Andrews
Lab and Compliance Manager
Augusta County Service Authority
P.O. Box 859
Verona, VA 24482

Subject: Acceptance of Stuarts Draft WWTP's Biosolids at the Augusta Regional Landfill

Dear Ms. Andrews:

The Augusta Regional Landfill will accept biosolids from the Stuarts Draft WWTP as long as the waste meets the Solid Waste Management Regulation 9VAC-20-81-140.B.4.e. and our Solid Waste Facility Permit Number 585.

The regulation and our permit require that biosolids be dewatered and contain no free liquids (must be able to pass a paint filter test).

If you have any questions concerning this matter, please call me at (540) 337-2857 ext. 104.

Sincerely,

Gregory A. Thomasson, P.E.
Director of Solid Waste Management

NOTICE AND NECESSARY INFORMATION

Biosolids notification requirements to comply with 9VAC25-31-530.F – G or 9VAC25-32-313.G – H.

Part I – To be completed by PREPARERS of biosolids and provided to the person who applies or receives those biosolids

Facility Name: Stuarts Draft WWTP Permit Number: VA0066877

A. Metals Limitations

Sample Date(s): 7/22/15 Number of Samples: 1

Parameters	Concentrations		PC/CPLR Limitations	Ceiling Limitations [2]
	Monthly Average (mg/kg) [1]	Maximum (mg/kg) [1]	Monthly Average (mg/kg) [1]	Maximum (mg/kg) [1]
Total Arsenic	3.0	3.0	41	75
Total Cadmium	1.9	1.9	39	85
Total Copper	628	628	1,500	4,300
Total Lead	18.4	18.4	300	840
Total Mercury	0.9	0.9	17	57
Total Molybdenum	4.77	4.77	NL [3]	75
Total Nickel	11.6	11.6	420	420
Total Selenium	8.9	8.9	100	100
Total Zinc	748	748	2,800	7,500

(1) Values to be reported on a dry weight basis.
(2) Sludge may not be land applied if any pollutant exceeds these values.
(3) The monthly average concentration for molybdenum is currently under study by USEPA. Research suggests that a monthly average molybdenum concentration below 40 mg/kg may be appropriate to reduce the risk of copper deficiency in grazing animals.

B. Class B Pathogen Reduction

Class B biosolids pathogen reduction requirements were achieved in accordance with 9VAC25-31-710.B or 9VAC25-32-675.B by:

☑ Alternative 1: Fecal coliform testing -geometric mean of 7 samples

☐ Alternative 2: Process to Significantly Reduce Pathogens (PSRP) - if selected, indicate process below:

- ☐ Option 1 - Aerobic digestion
- ☐ Option 2 - Air drying beds
- ☐ Option 3 - Anaerobic digestion
- ☐ Option 4 - Composting
- ☐ Option 5 - Lime Stabilization
- ☐ Other: _____

NOTICE AND NECESSARY INFORMATION

C. Vector Attraction Reduction (VAR)

☑ VAR requirements for Class B biosolids were achieved in accordance with 9VAC25-31-720.B.1 – 8 or 9VAC25-32-685.B.1 – 8 by:

☐ Option 1: ≥ 38% volatile solids reduction
☐ Option 2: Anaerobic 40 day bench test
☐ Option 3: Aerobic 30 day bench test
☑ Option 4: Specific Oxygen Uptake Rate (SOUR) test
☐ Option 5: Aerobic process, 14 days @ 40°C (45°C)
☐ Option 6: Alkaline stabilization
☐ Option 7: Dry to ≥ 75% T.S. w/no unstabilized 1° sludges
☐ Option 8: Dry to ≥ 90% T.S.

OR

☐ VAR requirements for Class B biosolids were **not** achieved in accordance with 9VAC25-31-720.B.1 – 8 or 9VAC25-32-685.B.1 – 8; therefore, Option 9 (Injection) or Option 10 (Incorporation) is required at the land application site.

D. Nutrient Concentrations

Sample Date(s): 7/11/14 Number of Samples: 1

Parameters	Concentrations	
	Monthly Average (mg/kg) [1]	Maximum (mg/kg) [1]
~~Total Nitrogen as N~~ (TKN)	49,700	49,700
~~Total Phosphorus as P~~ (P_2O_5)	48,200	48,200

*Values to be reported on a dry weight basis.

E. Certification

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system or those persons directly responsible for gathering the information, the information is, to the best of my knowledge and belief, true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Name and official title Kenneth J. Fanfoni, Executive Director

Signature Kenneth J Fanfoni Date Signed 11/20/15

Telephone number 540-245-5670

VIRGINIA POLLUTION DISCHARGE ELIMINATION SYSTEM

MUNICIPAL EFFLUENT AND BIOSOLIDS

NON-HAZARDOUS WASTE DECLARATION

For waste to be land applied, the owner of the treatment works, as defined by 9 VAC 25-31-10, must sign the following statement:

I certify that the waste from the facility identified below and described in this application is non-hazardous and not regulated under the Resource Conservation and Recovery Act or the Virginia Hazardous Waste Management Regulation (9 VAC 20-60).

Facility Name: Stuarts Draft WWTP

VPDES, NPDES or State Permit Number: VA0066877

(Signature of Owner) 11/20/15 (Date)

Kenneth J. Fanfoni
(Printed Name of Owner)

Executive Director
(Title)

Generator Contact Information

Jean Andrews, Lab and Compliance Manager
(Name and Title)

PO Box 859, Verona VA 24482
(Address)

540-245-5677
(Phone Number)

jandrews@co.augusta.va.us
(Email Address)

Augusta County Service Authority

Stuarts Draft WWTP (VA0066877) Biosolids Data

Facility	Sample Date	Solids		TKN		Ammonia		NO_3-NO_2	Organic Nitrogen	
		%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	%	mg/kg
Stuarts Draft - 2013	8/22/2013	1.23	12,300	4.88	48,800	0.73	7,320	1,460	4.15	41,480
Stuarts Draft - 2014	7/11/2014	1.55	15,500	5.29	52,900	0.39	3,870	4,980	4.90	49,030
Stuarts Draft - 2015	7/22/2015	1.32	13,200		49,700		1,170	573		48,700

Facility	Sample Date	Phosphorus		Available P_2O_5		Potassium		Alkalinity	pH	Moisture	Total Volatile Solids	
		%	mg/kg	%	mg/kg	%	mg/kg	mg/kg	S.U.	%	%	mg/kg
Stuarts Draft - 2013	8/22/2013	3.73	37,300	7.72	77,200	0.41	4,070	54,600	7.11	98.77	63.19	631,900
Stuarts Draft - 2014	7/11/2014	3.56	35,600	4.82	48,200	0.39	3,910	41,100	6.84	98.45	66.77	667,700
Stuarts Draft - 2015	7/22/2015			<0.01			4,820	15,000	6.93	98.68	69.20	692,000

11/17/2015

Augusta County Service Authority

Stuarts Draft WWTP (VA0066877) Biosolids Data

	Arsenic	Cadmium	Chromium	Copper	Lead	Mercury	Molybdenum	Nickel	Selenium	Zinc
Date	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg	mg/kg
8/22/2013	6.0	<2.0	56	761	21	0.7	6	18	7.0	961
7/11/2014	4.0	2.0	60	671	26	0.9	6	18	6.0	1,010
7/22/2015	3.0	1.9	19.2	628	18.4	0.9	4.77	11.6	8.9	748
EPA Ceiling*	75	85	3,000	4,300	840	57	75	4,000	250	7,500
EPA Exceptional **	41	39	1,200	1,500	300	17	N/A	420	36	2,800

* EPA Ceiling Concentration for Pollutants for all Sewage Sludge Applied to Land (mg/kg).

** EPA Pollutant Concentration for Exceptional Quality Sewage Sludge (mg/kg).

Augusta County Service Authority

Stuarts Draft WWTP (VA0066877) TCLP Data

Parameter	Stuarts Draft 8/22/2013 (mg/L)	Stuarts Draft 10/7/2014 (mg/L)	Stuarts Draft 9/1/2015 (mg/L)
Arsenic	<0.500	<0.100	<0.100
Barium	0.054	<5.00	<5.00
Benzene	<0.050	<0.02	<0.02
Cadmium	<0.050	<0.0400	<0.0400
Carbon Tetrachloride	<0.050	<0.02	<0.02
Chlordane	<0.00307	<0.02	<0.030
Chlorobenzene	<0.050	<2.00	<0.02
Chloroform	<0.050	<0.100	<2.00
Chromium	<0.500	<0.01	<0.100
o-Cresol	<0.0246	<0.01	<0.02
m/p-Cresol	<0.0246	<0.01	<0.02
2,4-D	<0.00998	<0.001	<0.001
1,4-Dichlorobenzene	<0.0246	<0.02	<0.02
1,2-Dichloroethane	<0.050	<0.02	<0.02
1,1-Dichloroethene	<0.050	<0.02	<0.02
2,4-Dinitrotoluene	<0.0246	<0.01	<0.02
Endrin	<0.00025	<0.005	<0.005
gamma-BHC	<0.00012	<0.005	<0.005
Heptachlor	<0.00012	<0.005	<0.005
Heptachlor (+epoxide)	<0.00012	<0.005	<0.005
Hexachlorobenzene	<0.0246	<0.01	<0.02
Hexachlorobutadiene	<0.0246	<0.01	<0.02
Hexachloroethane	<0.0246	<0.01	<0.02
Lead	<0.500	<0.100	<0.100
Mercury	<0.0020	<0.008	<0.008
Methoxychlor	<0.00123	<0.005	<0.005
Methyl ethyl Ketone	<0.500	<0.20	0.2
Nitrobenzene	<0.0246	<0.01	<0.02
Pentachlorophenol	<0.0246	<0.02	<0.02
Pyridine	<0.0246	<0.01	<0.02
Selenium	<0.500	<0.250	<0.250
Silver	<0.100	<0.100	<0.100
Tetrachloroethylene	<0.050	<0.02	<0.02
Toxaphene	<0.00307	<0.500	<0.500
Trichloroethylene	<0.050	<0.02	<0.02
2,4,5-Trichlorophenol	<0.0246	<0.01	<0.02
2,4,6-Trichlorophenol	<0.0246	<0.01	<0.02
2,4,5-TP (Silvex)	<0.00499	<0.0005	<0.0005
Vinyl Chloride	<0.050	<0.02	<0.02

Stuarts Draft WWTP - Fecal Coliform and SOURs Data

Fecal Coliforms	2012**	2013**	2014**
Sample #1	8,364	62,857	8,941
Sample #2	7,619	39,639	8,706
Sample #3	6,545	57,143	5,176
Sample #4	8,571	60,000	4,664
Sample #5	10,286	65,714	4,239
Sample #6	10,476	27,542	6,750
Sample #7	10,095	65,714	5,882
Geo Mean	8,738	51,912	6,106

SOUR	0.5	1.10	0.94
% Total Solids	2.1	1.8	0.8

** No biosolids were land applied this year.

Fecal coliforms were performed in-house. ACSA is not certified for this parameter.

VPDES Permit Application Addendum

1. **Entity to whom the permit is to be issued:** Augusta County Service Authority
   Who will be legally responsible for the wastewater treatment facilities and compliance with the permit? This may or may not be the facility or property owner.

2. **Is this facility located within city or town boundaries?** ☑ YES ☐ NO
   Include a topographic map identifying the location of the facility, the property boundaries, and the discharge point.

3. **What is the tax map parcel number for the land where this facility is located?** 84-100

4. **For the facility to be covered by this permit, how many acres will be disturbed during the next five years due to new construction activities?** 0

5. ALL FACILITIES: **What is the design average flow of this facility?** 4.0 MGD
   Industrial facilities: **What is the maximum 30-day avg. production level (include units)?** NA

   In addition to the above design flow or production level, should the permit be written with limits for any other discharge flow tiers or production levels? ☐ YES ☑ NO

   If "Yes", please specify the other flow tiers (in MGD) or production levels: _____
   Please consider: Is your facility's design flow considerably greater than your current flow? Do you plan to expand operations during the next five years?

6. **Nature of operations generating wastewater:**
   Public Sewer

   78 % of flow from domestic connections/sources
   Number of private residences to be served by the wastewater treatment facilities: ☐ 0 ☐ 1-49 ☑ 50 or more

   22 % of flow from non-domestic connections/sources

7. **Mode of discharge:** ☑ Continuous ☐ Intermittent ☐ Seasonal
   Describe frequency and duration of intermittent or seasonal discharges:

8. **Identify the characteristics of the receiving stream at the point just above the facility's discharge point:**
   ☑ Permanent stream, never dry
   ☐ Intermittent stream, usually flowing, sometimes dry
   ☐ Ephemeral stream, wet-weather flow, often dry
   ☐ Effluent-dependent stream, usually or always dry
   ☐ Lake or pond at or below the discharge point
   ☐ Other: _____

9. **Consent to receive electronic mail**
   The Department of Environmental Quality (DEQ) may deliver permits, certifications and plan approvals to recipients, including applicants or permittees, by electronically certified mail where the recipients notify DEQ of their consent to receive mail electronically (§ 10.1-1183). Check *only one* of the following to consent to or decline receipt of electronic mail from DEQ as follows:

   ☑ Applicant or permittee agrees to receive by electronic mail the permit and any plan approvals associated with the permit that may be issued for the proposed pollutant management activity, and to certify receipt of such electronic mail when requested by the DEQ.
   Please provide email: jandrews@co.augusta.va.us

   ☐ Applicant or permittee declines to receive by electronic mail the permit and any plan approvals associated with the permit that may be issued for the proposed pollutant management activity.

VIRGINIA DEQ NO EXPOSURE CERTIFICATION
FOR EXCLUSION FROM VPDES STORM WATER PERMITTING

Submission of this **No Exposure Certification** constitutes notice that the entity identified below does not require permit authorization for its storm water discharges associated with industrial activity under the VPDES Permit Program due to the existence of a condition of **No Exposure**.

A condition of **No Exposure** exists at an industrial facility when all industrial materials and activities are protected by a storm resistant shelter to prevent exposure to rain, snow, snowmelt, and/or runoff. Industrial materials or activities include, but are not limited to, material handling equipment or activities, industrial machinery, raw materials, intermediate products, by-products, final products, or waste products. Material handling activities include the storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product or waste product. A storm resistant shelter is not required for the following industrial materials and activities:

- drums, barrels, tanks, and similar containers that are tightly sealed, provided those containers are not deteriorated and do not leak. "Sealed" means banded or otherwise secured and without operational taps or valves;
- adequately maintained vehicles used in material handling; and
- final products, other than products that would be mobilized in storm water discharges (e.g., rock salt).

A No Exposure Certification must be provided for each facility qualifying for the No Exposure exclusion. In addition, the exclusion from VPDES permitting is available on a facility-wide basis only, not for individual outfalls. If any industrial activities or materials are or will be exposed to precipitation, the facility is not eligible for the No Exposure exclusion.

By signing and submitting this No Exposure Certification form, the entity below is certifying that a condition of No Exposure exists at its facility or site, and is obligated to comply with the terms and conditions at 9 VAC 25-31-120 E (the VPDES Permit Regulation).

Please Type or Print All Information. ALL INFORMATION ON THIS FORM MUST BE PROVIDED.

1. **Facility Operator Information**

   Name: Augusta County Service Authority

   Mailing Address: PO Box 859

   City: Verona State: VA Zip: 24482 Phone: 540-245-5670

2. **Facility/Site Location Information**

   Facility Name: Stuarts Draft WWTP

   Address: 391 Wayne Avenue

   City: Stuarts Draft State: VA Zip: 24477

   County Name: Augusta

   Latitude: 38° 01' 07.09" Longitude: 79° 08' 17.93"

3. **Was the facility or site previously covered under a VPDES storm water permit?** Yes ☐ No ☒

   If "Yes", enter the VPDES permit number: _____

4. **SIC/Activity Codes:** Primary: 4952 Secondary (if applicable): _____

5. **Total size of facility/site associated with industrial activity:** 17 acres

6. **Have you paved or roofed over a formerly exposed pervious area in order to qualify for the No Exposure exclusion?** Yes ☐ No ☒

   If "Yes", please indicate approximately how much area was paved or roofed. Completing this question does not disqualify you for the No Exposure exclusion. However, DEQ may use this information in considering whether storm water discharges from your site are likely to have an adverse impact on water quality, in which case you could be required to obtain permit coverage.

   Less than one acre ☐ One to five acres ☐ More than five acres ☐

7. Exposure Checklist

Are any of the following materials or activities exposed to precipitation, now or in the foreseeable future? (Please check either "Yes" or "No" in the appropriate box.) **If you answer "Yes" to any of these questions (1) through (11), you are not eligible for the No Exposure exclusion.**

	Yes	No
(1) Using, storing or cleaning industrial machinery or equipment, and areas where residuals from using, storing or cleaning industrial machinery or equipment remain and are exposed to storm water	☐	☒
(2) Materials or residuals on the ground or in storm water inlets from spill/leaks	☐	☒
(3) Materials or products from past industrial activity	☐	☒
(4) Material handling equipment (except adequately maintained vehicles)	☐	☒
(5) Materials or products during loading/unloading or transporting activities	☐	☒
(6) Materials or products stored outdoors (except final products intended for outside use [e.g., new cars] where exposure to storm water does not result in the discharge of pollutants)	☐	☒
(7) Materials contained in open, deteriorated or leaking storage drums, barrels, tanks, and similar containers	☐	☒
(8) Materials or products handled/stored on roads or railways owned or maintained by the discharger	☐	☒
(9) Waste material (except waste in covered, non-leaking containers [e.g., dumpsters])	☐	☒
(10) Application or disposal of process wastewater (unless otherwise permitted)	☐	☒
(11) Particulate matter or visible deposits of residuals from roof stacks and/or vents not otherwise regulated (i.e., under an air quality control permit) and evident in the storm water outflow	☐	☒

8. Certification Statement

I certify under penalty of law that I have read and understand the eligibility requirements for claiming a condition of no exposure and obtaining an exclusion from VPDES storm water permitting; and that there are no discharges of storm water contaminated by exposure to industrial activities or materials from the industrial facility identified in this document (except as allowed under 9 VAC 25-31-120 E 2).

I understand that I am obligated to submit a No Exposure Certification form once every five years to the Department of Environmental Quality and, if requested, to the operator of the local MS4 into which this facility discharges (where applicable). I understand that I must allow the Department, or MS4 operator where the discharge is into the local MS4, to perform inspections to confirm the condition of no exposure and to make such inspection reports publicly available upon request. I understand that I must obtain coverage under a VPDES permit prior to any point source discharge of storm water associated with industrial activity from the facility.

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based upon my inquiry of the person or persons who manage the system, or those persons directly involved in gathering the information, the information submitted is to the best of my knowledge and belief true, accurate and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Print Name: Kenneth J. Fanfoni

Print Title: Executive Director

Signature: Kenneth J. Fanfoni

Date: 11/20/15

For Department of Environmental Quality Use Only

Accepted/Not Accepted by: _____ Date: _____

PUBLIC NOTICE BILLING INFORMATION

I hereby authorize the Department of Environmental Quality to have the cost of publishing a public notice billed to the Agent/Department shown below. The public notice will be published once a week for two consecutive weeks in the Staunton News Leader in accordance with 9 VAC 25-31-290.C.2.

Agent/Department to be billed: Augusta County Service Authority

Owner:

Agent/Department Address: PO Box 859

Verona VA 24482

Agent's Telephone No.: 540-245-5670

Printed Name: Ken Fanfoni

Authorizing Agent – Signature: Ken A J Fanfoni

Date: 11/20/15

Facility Name: Stuarts Draft WWTP

VPDES Permit No. VA 0066877

VPDES/VPA Permit Billing Information Form
for Annual Maintenance Fee

Facility Name:	Stuarts Draft WWTP
Permit Number:	VA0066877
Owner Name:	Augusta County Service Authority
Owner Address:	PO Box 859
	Verona, VA 24482
Billing Contact Name:	Jean Andrews
Title:	Lab and Compliance Manager
Phone Number:	540-245-5677
E-Mail Address:	jandrews@co.augusta.va.us

REPORT OF ANALYSIS

CLIENT: Augusta County Service Authority
ATTN: Jean Andrews
ADDRESS: 18 Government Ctr Ln PO BOX 859
Verona, VA 24482-0859
PHONE: (540) 245-5670
FAX: e: jandrews@co.augusta.va.us

Special Notes: Supplement to Report No.:15-01469 10:37
(Revised added Hardness)
RE: Industrial Pretreatment Monitoring
EPA FORM 2A - PART D
Discharge to Stuarts Draft WWTP

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 1/28/2015 Time: 1115
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:
PICK UP BY: UPS
SAMPLE RECEIPT:
Date: 1/29/2015 Time: 0925
NUMBER OF CONTAINERS: 8
SAMPLE CONDITION: ☑ Good ☐ Other (See C-O-C)
REPORT NO: 15-01469 16:32

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-01469

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Total Recoverable Antimony	200.7	0.005	< 0.005	mg/L	EFA	02/02/15	1508
Total Recoverable Arsenic	200.7	0.005	< 0.005	mg/L	EFA	02/02/15	1508
Total Recoverable Beryllium	200.7	0.0005	< 0.0005	mg/L	EFA	02/02/15	1508
Total Recoverable Cadmium	200.7	0.0005	< 0.0005	mg/L	EFA	02/02/15	1508
Total Recoverable Chromium	200.7	0.001	0.001	mg/L	EFA	02/02/15	1508
Total Recoverable Copper	200.7	0.002	0.004	mg/L	EFA	02/02/15	1508
Total Recoverable Lead	200.7	0.005	< 0.005	mg/L	EFA	02/02/15	1508
Total Recoverable Mercury	245.1	0.0002	< 0.0002	mg/L	PEJ	02/05/15	1542
Total Recoverable Nickel	200.7	0.005	< 0.005	mg/L	EFA	02/02/15	1508
Total Recoverable Selenium	200.7	0.005	< 0.005	mg/L	EFA	02/02/15	1508
Total Recoverable Silver	200.7	0.001	< 0.001	mg/L	EFA	02/02/15	1508
Total Recoverable Thallium	200.7	0.005	< 0.005	mg/L	EFA	02/02/15	1508
Total Recoverable Zinc	200.7	0.005	0.080	mg/L	EFA	02/02/15	1508
Phenols	420.4	0.02	< 0.02	mg/L	PEJ	01/30/15	1403
Cyanide	335.4	0.005	< 0.005	mg/L	ARC	01/29/15	1326
Hardness	*2340B	0.331	125	mg/L	EFA	02/02/15	1508
Semi-Volatiles							
Dibenz[a,h]Anthracene	625	5	< 5	ug/L	CLH	02/03/15	2208
4-Nitrophenol	625	5	< 5	ug/L	CLH	02/03/15	2208
Benzidine	625	5	< 5	ug/L	CLH	02/03/15	2208
Benzo[a]Anthracene	625	5	< 5	ug/L	CLH	02/03/15	2208
Chrysene	625	5	< 5	ug/L	CLH	02/03/15	2208
3,3-Dichlorobenzidine	625	5	< 5	ug/L	CLH	02/03/15	2208
Bis(2-ethylhexyl) phthalate	625	5	< 5	ug/L	CLH	02/03/15	2208
Di-n-Octyl phthalate	625	5	< 5	ug/L	CLH	02/03/15	2208
Benzo[b]Fluoranthene	625	5	< 5	ug/L	CLH	02/03/15	2208
Benzo[k]Fluoranthene	625	5	< 5	ug/L	CLH	02/03/15	2208
Benzo[a]Pyrene	625	5	< 5	ug/L	CLH	02/03/15	2208
Indeno[1,2,3-c,d]Pyrene	625	5	< 5	ug/L	CLH	02/03/15	2208
Benzo[g,h,i]Perylene	625	5	< 5	ug/L	CLH	02/03/15	2208

REPORT OF ANALYSIS

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-01469

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Semi-Volatiles							
2-Chlorophenol	625	5	< 5	ug/L	CLH	02/03/15	2208
Phenol	625	5	< 5	ug/L	CLH	02/03/15	2208
2-Nitrophenol	625	5	< 5	ug/L	CLH	02/03/15	2208
2,4-Dimethylphenol	625	5	< 5	ug/L	CLH	02/03/15	2208
2,4-Dichlorophenol	625	5	< 5	ug/L	CLH	02/03/15	2208
4-Chloro 3-Methylphenol	625	5	< 5	ug/L	CLH	02/03/15	2208
Fluoranthene	625	5	< 5	ug/L	CLH	02/03/15	2208
2,4-Dinitrophenol	625	20	< 20	ug/L	CLH	02/03/15	2208
Pyrene	625	5	< 5	ug/L	CLH	02/03/15	2208
4,6 Dinitro-o-cresol	625	5	< 5	ug/L	CLH	02/03/15	2208
Pentachlorophenol	625	10	< 10	ug/L	CLH	02/03/15	2208
2,4,6-Trichlorophenol	625	5	< 5	ug/L	CLH	02/03/15	2208
Bis(2-chloroethyl) ether	625	5	< 5	ug/L	CLH	02/03/15	2208
Hexachloroethane	625	5	< 5	ug/L	CLH	02/03/15	2208
1,2,4-Trichlorobenzene	625	5	< 5	ug/L	CLH	02/03/15	2208
Hexachlorobutadiene	625	5	< 5	ug/L	CLH	02/03/15	2208
Hexachlorocyclopentadiene	625	5	< 5	ug/L	CLH	02/03/15	2208
2-Chloronaphthalene	625	5	< 5	ug/L	CLH	02/03/15	2208
Butyl benzyl phthalate	625	5	< 5	ug/L	CLH	02/03/15	2208
N-Nitrosodimethylamine	625	5	< 5	ug/L	CLH	02/03/15	2208
di-n-Butyl phthalate	625	5	< 5	ug/L	CLH	02/03/15	2208
Bis(2-chloroisopropyl) ether	625	5	< 5	ug/L	CLH	02/03/15	2208
N-Nitroso-di-n-propylamine	625	5	< 5	ug/L	CLH	02/03/15	2208
Nitrobenzene	625	5	< 5	ug/L	CLH	02/03/15	2208
Isophorone	625	5	< 5	ug/L	CLH	02/03/15	2208
Bis(2-chloroethoxy)methane	625	5	< 5	ug/L	CLH	02/03/15	2208
Naphthalene	625	5	< 5	ug/L	CLH	02/03/15	2208
4-Bromophenyl phenyl ether	625	5	< 5	ug/L	CLH	02/03/15	2208
Hexachlorobenzene	625	5	< 5	ug/L	CLH	02/03/15	2208
Acenaphthylene	625	5	< 5	ug/L	CLH	02/03/15	2208
Anthracene	625	5	< 5	ug/L	CLH	02/03/15	2208
Phenanthrene	625	5	< 5	ug/L	CLH	02/03/15	2208
N-nitroso-di-phenylamine	625	5	< 5	ug/L	CLH	02/03/15	2208
1,2,-Diphenylhydrazine	625	5	< 5	ug/L	CLH	02/03/15	2208
Diethyl phthalate	625	5	< 5	ug/L	CLH	02/03/15	2208
4-Chlorophenyl phenyl ether	625	5	< 5	ug/L	CLH	02/03/15	2208
Fluorene	625	5	< 5	ug/L	CLH	02/03/15	2208
2,4-Dinitrotoluene	625	5	< 5	ug/L	CLH	02/03/15	2208
Acenaphthene	625	5	< 5	ug/L	CLH	02/03/15	2208
2,6-Dinitrotoluene	625	5	< 5	ug/L	CLH	02/03/15	2208
Dimethyl phthalate	625	5	< 5	ug/L	CLH	02/03/15	2208
Volatiles							
Trichlorofluoromethane	624	5	< 5	ug/L	SDT	01/29/15	1725
Ethylbenzene	624	5	< 5	ug/L	SDT	01/29/15	1725

James R. Reed & Associates
770 Pilot House Drive, Newport News, VA 23606
(757) 873-4703 • Fax: (757) 873-1498

VELAP# 460013
EPA# VA00015

REPORT OF ANALYSIS

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-01469

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Volatiles							
2-Chloroethyl vinyl ether	624	10	< 10	ug/L	SDT	01/29/15	1725
Bromoform	624	5	< 5	ug/L	SDT	01/29/15	1725
Tetrachloroethene	624	5	< 5	ug/L	SDT	01/29/15	1725
Toluene	624	5	< 5	ug/L	SDT	01/29/15	1725
Chlorobenzene/Monochlorobenzene	624	5	< 5	ug/L	SDT	01/29/15	1725
cis-1,3-Dichloropropene	624	5	< 5	ug/L	SDT	01/29/15	1725
Acrolein	624	50	< 50	ug/L	SDT	01/29/15	1725
Acrylonitrile	624	50	< 50	ug/L	SDT	01/29/15	1725
1,3-Dichloropropene(cis & trans)	624	5	< 5	ug/L	SDT	01/29/15	1725
1,2-Dichlorobenzene	624	5	< 5	ug/L	SDT	01/29/15	1725
1,3-Dichlorobenzene	624	5	< 5	ug/L	SDT	01/29/15	1725
1,4-Dichlorobenzene	624	5	< 5	ug/L	SDT	01/29/15	1725
trans-1,2-Dichloroethene	624	5	< 5	ug/L	SDT	01/29/15	1725
Benzene	624	5	< 5	ug/L	SDT	01/29/15	1725
Dichlorodifluoromethane	624	5	< 5	ug/L	SDT	01/29/15	1725
1,1-Dichloroethane	624	5	< 5	ug/L	SDT	01/29/15	1725
Bromomethane	624	5	< 5	ug/L	SDT	01/29/15	1725
Vinyl Chloride	624	5	< 5	ug/L	SDT	01/29/15	1725
1,1,2-Trichloroethane	624	5	< 5	ug/L	SDT	01/29/15	1725
Methylene Chloride/Dichloromethane	624	5	< 5	ug/L	SDT	01/29/15	1725
1,1-Dichloroethene	624	5	< 5	ug/L	SDT	01/29/15	1725
Chloromethane (Methyl Chloride)	624	5	< 5	ug/L	SDT	01/29/15	1725
cis-1,2-Dichloroethene	624	5	< 5	ug/L	SDT	01/29/15	1725
Chloroform	624	5	< 5	ug/L	SDT	01/29/15	1725
Dibromochloromethane	624	5	< 5	ug/L	SDT	01/29/15	1725
1,1,1-Trichloroethane	624	5	< 5	ug/L	SDT	01/29/15	1725
Carbon Tetrachloride	624	5	< 5	ug/L	SDT	01/29/15	1725
Bromodichloromethane	624	5	< 5	ug/L	SDT	01/29/15	1725
1,1,2,2-Tetrachloroethane	624	5	< 5	ug/L	SDT	01/29/15	1725
Chloroethane	624	5	< 5	ug/L	SDT	01/29/15	1725
1,2-Dichloropropane	624	5	< 5	ug/L	SDT	01/29/15	1725
trans-1,3-Dichloropropene	624	5	< 5	ug/L	SDT	01/29/15	1725
Trichloroethene	624	5	< 5	ug/L	SDT	01/29/15	1725
1,2-Dichloroethane	624	5	< 5	ug/L	SDT	01/29/15	1725

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VELAP# 460013
EPA# VA00015

REPORT OF ANALYSIS

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-01469

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

The results on this report relate only to the sample(s) provided for analysis.

Results conform to NELAC standards, where applicable, unless otherwise indicated.

*SM 1997

Authorized By: Elaine Claiborne

Elaine Claiborne, Laboratory Director

Date: 14-Aug-15

James R. Reed & Associates
770 Pilot House Drive, Newport News, VA 23606
(757) 873-4703 • Fax: (757) 873-1498

VELAP# 460013
EPA# VA00015

REPORT OF ANALYSIS

CLIENT: Augusta County Service Authority
ATTN: Jean Andrews
ADDRESS: 18 Government Ctr Ln PO BOX 859
Verona, VA 24482-0859
PHONE: (540) 245-5670
FAX: e: jandrews@co.augusta.va.us

Special Notes: Supplement to Report No.:15-04830 15:11
(Revised added Hardness)
RE: STUARTS DRAFT
EPA FORM 2A PART D

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 4/1/2015 Time: 1015
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: UPS
SAMPLE RECEIPT:
Date: 4/2/2015 Time: 0920
NUMBER OF CONTAINERS: 8
SAMPLE CONDITION: ✓ Good | Other (See C-O-C)

REPORT NO: 15-04830 16:32

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-04830

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Total Recoverable Antimony	200.7	0.005	< 0.005	mg/L	EFA	04/06/15	1213
Total Recoverable Arsenic	200.7	0.005	< 0.005	mg/L	EFA	04/06/15	1213
Total Recoverable Beryllium	200.7	0.0005	< 0.0005	mg/L	EFA	04/06/15	1213
Total Recoverable Cadmium	200.7	0.0005	< 0.0005	mg/L	EFA	04/06/15	1213
Total Recoverable Chromium	200.7	0.001	< 0.001	mg/L	EFA	04/06/15	1213
Total Recoverable Copper	200.7	0.002	< 0.002	mg/L	EFA	04/06/15	1213
Total Recoverable Lead	200.7	0.005	< 0.005	mg/L	EFA	04/06/15	1213
Total Recoverable Mercury	245.1	0.0002	< 0.0002	mg/L	PEJ	04/08/15	1528
Total Recoverable Nickel	200.7	0.005	< 0.005	mg/L	EFA	04/06/15	1213
Total Recoverable Selenium	200.7	0.005	< 0.005	mg/L	EFA	04/06/15	1213
Total Recoverable Silver	200.7	0.001	< 0.001	mg/L	EFA	04/06/15	1213
Total Recoverable Thallium	200.7	0.005	< 0.005	mg/L	EFA	04/06/15	1213
Total Recoverable Zinc	200.7	0.005	0.033	mg/L	EFA	04/06/15	1213
Phenols	420.4	0.02	< 0.02	mg/L	PEJ	04/07/15	1432
Cyanide	335.4	0.005	< 0.005	mg/L	ARC	04/09/15	1119
Hardness	*2340B	0.331	108	mg/L	EFA	04/06/15	1213
Semi-Volatiles							
2,4-Dichlorophenol	625	5	< 5	ug/L	CLH	04/09/15	0000
gamma-BHC	625	5	< 5	ug/L	CLH	04/09/15	0000
beta-BHC	625	5	< 5	ug/L	CLH	04/09/15	0000
alpha-BHC	625	5	< 5	ug/L	CLH	04/09/15	0000
Pentachlorophenol	625	10	< 10	ug/L	CLH	04/09/15	0000
4,6 Dinitro-o-cresol	625	5	< 5	ug/L	CLH	04/09/15	0000
4-Nitrophenol	625	5	< 5	ug/L	CLH	04/09/15	0000
2,4-Dinitrophenol	625	20	< 20	ug/L	CLH	04/09/15	0000
4-Chloro 3-Methylphenol	625	5	< 5	ug/L	CLH	04/09/15	0000
Endrin aldehyde	625	5	< 5	ug/L	CLH	04/09/15	0000
2,4-Dimethylphenol	625	5	< 5	ug/L	CLH	04/09/15	0000
2-Nitrophenol	625	5	< 5	ug/L	CLH	04/09/15	0000
Phenol	625	5	< 5	ug/L	CLH	04/09/15	0000

REPORT OF ANALYSIS

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-04830

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Semi-Volatiles							
2-Chlorophenol	625	5	< 5	ug/L	CLH	04/09/15	0000
Benzo[g,h,i]Perylene	625	5	< 5	ug/L	CLH	04/09/15	0000
Dibenz[a,h]Anthracene	625	5	< 5	ug/L	CLH	04/09/15	0000
Heptachlor	625	5	< 5	ug/L	CLH	04/09/15	0000
2,4,6-Trichlorophenol	625	5	< 5	ug/L	CLH	04/09/15	0000
Indeno[1,2,3-c,d]Pyrene	625	5	< 5	ug/L	CLH	04/09/15	0000
PCB 1260	625	5	< 5	ug/L	CLH	04/09/15	0000
PCB 1254	625	5	< 5	ug/L	CLH	04/09/15	0000
PCB 1248	625	5	< 5	ug/L	CLH	04/09/15	0000
PCB 1232	625	5	< 5	ug/L	CLH	04/09/15	0000
PCB 1221	625	5	< 5	ug/L	CLH	04/09/15	0000
Toxaphene	625	20	< 20	ug/L	CLH	04/09/15	0000
Endosulfan sulfate	625	5	< 5	ug/L	CLH	04/09/15	0000
beta Endosulfan	625	5	< 5	ug/L	CLH	04/09/15	0000
p,p-DDT	625	5	< 5	ug/L	CLH	04/09/15	0000
delta-BHC	625	5	< 5	ug/L	CLH	04/09/15	0000
p,p-DDD	625	5	< 5	ug/L	CLH	04/09/15	0000
Endrin	625	5	< 5	ug/L	CLH	04/09/15	0000
Dieldrin	625	5	< 5	ug/L	CLH	04/09/15	0000
p,p-DDE	625	5	< 5	ug/L	CLH	04/09/15	0000
alpha Endosulfan	625	5	< 5	ug/L	CLH	04/09/15	0000
Heptachlor epoxide	625	5	< 5	ug/L	CLH	04/09/15	0000
Aldrin	625	5	< 5	ug/L	CLH	04/09/15	0000
Chlordane	625	5	< 5	ug/L	CLH	04/09/15	0000
Bis(2-chloroisopropyl) ether	625	5	< 5	ug/L	CLH	04/09/15	0000
Acenaphthene	625	5	< 5	ug/L	CLH	04/09/15	0000
2,6-Dinitrotoluene	625	5	< 5	ug/L	CLH	04/09/15	0000
Dimethyl phthalate	625	5	< 5	ug/L	CLH	04/09/15	0000
Acenaphthylene	625	5	< 5	ug/L	CLH	04/09/15	0000
Naphthalene	625	5	< 5	ug/L	CLH	04/09/15	0000
Isophorone	625	5	< 5	ug/L	CLH	04/09/15	0000
Hexachloroethane	625	5	< 5	ug/L	CLH	04/09/15	0000
2,4-Dinitrotoluene	625	5	< 5	ug/L	CLH	04/09/15	0000
1,2,4-Trichlorobenzene	625	5	< 5	ug/L	CLH	04/09/15	0000
Bis(2-chloroethoxy)methane	625	5	< 5	ug/L	CLH	04/09/15	0000
Bis(2-chloroethyl) ether	625	5	< 5	ug/L	CLH	04/09/15	0000
N-Nitrosodimethylamine	625	5	< 5	ug/L	CLH	04/09/15	0000
Hexachlorobenzene	625	5	< 5	ug/L	CLH	04/09/15	0000
2-Chloronaphthalene	625	5	< 5	ug/L	CLH	04/09/15	0000
Hexachlorobutadiene	625	5	< 5	ug/L	CLH	04/09/15	0000
Hexachlorocyclopentadiene	625	5	< 5	ug/L	CLH	04/09/15	0000
PCB 1016/1242	625	5	< 5	ug/L	CLH	04/09/15	0000
Benzo[a]Pyrene	625	5	< 5	ug/L	CLH	04/09/15	0000
N-Nitroso-di-n-propylamine	625	5	< 5	ug/L	CLH	04/09/15	0000

REPORT OF ANALYSIS

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-04830

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Semi-Volatiles							
3,3-Dichlorobenzidine	625	5	< 5	ug/L	CLH	04/09/15	0000
Benzo[k]Fluoranthene	625	5	< 5	ug/L	CLH	04/09/15	0000
Benzo[b]Fluoranthene	625	5	< 5	ug/L	CLH	04/09/15	0000
Nitrobenzene	625	5	< 5	ug/L	CLH	04/09/15	0000
Bis(2-ethylhexyl) phthalate	625	5	< 5	ug/L	CLH	04/09/15	0000
Fluorene	625	5	< 5	ug/L	CLH	04/09/15	0000
Chrysene	625	5	< 5	ug/L	CLH	04/09/15	0000
Benzo[a]Anthracene	625	5	< 5	ug/L	CLH	04/09/15	0000
Butyl benzyl phthalate	625	5	< 5	ug/L	CLH	04/09/15	0000
Benzidine	625	5	< 5	ug/L	CLH	04/09/15	0000
Pyrene	625	5	< 5	ug/L	CLH	04/09/15	0000
N-nitroso-di-phenylamine	625	5	< 5	ug/L	CLH	04/09/15	0000
Di-n-Octyl phthalate	625	5	< 5	ug/L	CLH	04/09/15	0000
Fluoranthene	625	5	< 5	ug/L	CLH	04/09/15	0000
1,2,-Diphenylhydrazine	625	5	< 5	ug/L	CLH	04/09/15	0000
4-Bromophenyl phenyl ether	625	5	< 5	ug/L	CLH	04/09/15	0000
Phenanthrene	625	5	< 5	ug/L	CLH	04/09/15	0000
Anthracene	625	5	< 5	ug/L	CLH	04/09/15	0000
4-Chlorophenyl phenyl ether	625	5	< 5	ug/L	CLH	04/09/15	0000
di-n-Butyl phthalate	625	5	< 5	ug/L	CLH	04/09/15	0000
Diethyl phthalate	625	5	< 5	ug/L	CLH	04/09/15	0000
Volatiles							
cis-1,3-Dichloropropene	624	5	< 5	ug/L	SDT	04/03/15	1525
1,3-Dichlorobenzene	624	5	< 5	ug/L	SDT	04/03/15	1525
Ethylbenzene	624	5	< 5	ug/L	SDT	04/03/15	1525
Bromoform	624	5	< 5	ug/L	SDT	04/03/15	1525
Tetrachloroethene	624	5	< 5	ug/L	SDT	04/03/15	1525
Toluene	624	5	< 5	ug/L	SDT	04/03/15	1525
Chlorobenzene/Monochlorobenzene	624	5	< 5	ug/L	SDT	04/03/15	1525
Acrolein	624	50	< 50	ug/L	SDT	04/03/15	1525
Acrylonitrile	624	50	< 50	ug/L	SDT	04/03/15	1525
1,2-Dichlorobenzene	624	5	< 5	ug/L	SDT	04/03/15	1525
1,4-Dichlorobenzene	624	5	< 5	ug/L	SDT	04/03/15	1525
Dichlorodifluoromethane	624	5	< 5	ug/L	SDT	04/03/15	1525
trans-1,2-Dichloroethene	624	5	< 5	ug/L	SDT	04/03/15	1525
Benzene	624	5	< 5	ug/L	SDT	04/03/15	1525
1,1,2-Trichloroethane	624	5	< 5	ug/L	SDT	04/03/15	1525
1,3-Dichloropropene(cis & trans)	624	5	< 5	ug/L	SDT	04/03/15	1525
Methylene Chloride/Dichloromethane	624	5	< 5	ug/L	SDT	04/03/15	1525
2-Chloroethyl vinyl ether	624	10	< 10	ug/L	SDT	04/03/15	1525
Chloromethane (Methyl Chloride)	624	5	< 5	ug/L	SDT	04/03/15	1525
Bromomethane	624	5	< 5	ug/L	SDT	04/03/15	1525
Dibromochloromethane	624	5	< 5	ug/L	SDT	04/03/15	1525
Chloroethane	624	5	< 5	ug/L	SDT	04/03/15	1525

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VELAP# 460013
EPA# VA00015

REPORT OF ANALYSIS

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-04830

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Volatiles							
Trichlorofluoromethane	624	5	< 5	ug/L	SDT	04/03/15	1525
1,1-Dichloroethene	624	5	< 5	ug/L	SDT	04/03/15	1525
1,1-Dichloroethane	624	5	< 5	ug/L	SDT	04/03/15	1525
cis-1,2-Dichloroethene	624	5	< 5	ug/L	SDT	04/03/15	1525
Trichloroethene	624	5	< 5	ug/L	SDT	04/03/15	1525
1,2-Dichloroethane	624	5	< 5	ug/L	SDT	04/03/15	1525
1,1,1-Trichloroethane	624	5	< 5	ug/L	SDT	04/03/15	1525
Carbon Tetrachloride	624	5	< 5	ug/L	SDT	04/03/15	1525
Vinyl Chloride	624	5	< 5	ug/L	SDT	04/03/15	1525
Bromodichloromethane	624	5	< 5	ug/L	SDT	04/03/15	1525
1,1,2,2-Tetrachloroethane	624	5	< 5	ug/L	SDT	04/03/15	1525
1,2-Dichloropropane	624	5	< 5	ug/L	SDT	04/03/15	1525
trans-1,3-Dichloropropene	624	5	< 5	ug/L	SDT	04/03/15	1525
Chloroform	624	5	< 5	ug/L	SDT	04/03/15	1525

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

The results on this report relate only to the sample(s) provided for analysis.

Results conform to NELAC standards, where applicable, unless otherwise indicated.

*SM 1997

Authorized By: Elaine Claiborne

Elaine Claiborne, Laboratory Director

Date: 14-Aug-15

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VELAP# 460013
EPA# VA00015

REPORT OF ANALYSIS

CLIENT: Augusta County Service Authority
ATTN: Jean Andrews
ADDRESS: 18 Government Ctr Ln PO BOX 859
Verona, VA 24482-0859
PHONE: (540) 245-5670
FAX: e: jandrews@co.augusta.va.us

Special Notes: Supplement to Report No.:15-10281 17:26
(Revised added Hardness)
RE: STUARTS DRAFT - EPA FORM 2A, PART D

SAMPLE COLLECTED BY: CLIENT
GRAB COLLECTION:
Date: 7/14/2015 Time: 0000
COMPOSITE COLLECTION:
Start Date: Time:
End Date: Time:

PICK UP BY: UPS
SAMPLE RECEIPT:
Date: 7/15/2015 Time: 0920
NUMBER OF CONTAINERS: 8
SAMPLE CONDITION: ✓ Good ___ Other (See C-O-C)

REPORT NO: 15-10281 16:35

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-10281

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Total Recoverable Antimony	200.7	0.005	< 0.005	mg/L	EFA	07/23/15	1415
Total Recoverable Arsenic	200.7	0.005	< 0.005	mg/L	EFA	07/23/15	1415
Total Recoverable Beryllium	200.7	0.0005	< 0.0005	mg/L	EFA	07/23/15	1415
Total Recoverable Cadmium	200.7	0.0005	< 0.0005	mg/L	EFA	07/23/15	1415
Total Recoverable Chromium	200.7	0.001	< 0.001	mg/L	EFA	07/23/15	1415
Total Recoverable Copper	200.7	0.002	0.003	mg/L	EFA	07/23/15	1415
Total Recoverable Lead	200.7	0.005	< 0.005	mg/L	EFA	07/23/15	1415
Total Recoverable Mercury	245.1	0.0002	< 0.0002	mg/L	PEJ	07/21/15	1558
Total Recoverable Nickel	200.7	0.005	< 0.005	mg/L	EFA	07/23/15	1415
Total Recoverable Selenium	200.7	0.005	< 0.005	mg/L	EFA	07/23/15	1415
Total Recoverable Silver	200.7	0.001	< 0.001	mg/L	EFA	07/23/15	1415
Total Recoverable Thallium	200.7	0.005	< 0.005	mg/L	EFA	07/23/15	1415
Total Recoverable Zinc	200.7	0.005	0.044	mg/L	EFA	07/23/15	1415
Phenols	420.4	0.02	0.03 M	mg/L	PEJ	07/15/15	1449
Cyanide	335.4	0.005	< 0.005	mg/L	ARC	07/16/15	1315
Hardness	*2340B	0.331	108	mg/L	EFA	07/23/15	1415
Semi-Volatiles							
4-Bromophenyl phenyl ether	625	5	< 5	ug/L	CLH	07/23/15	0029
Fluorene	625	5	< 5	ug/L	CLH	07/23/15	0029
4-Chlorophenyl phenyl ether	625	5	< 5	ug/L	CLH	07/23/15	0029
Diethyl phthalate	625	5	< 5	ug/L	CLH	07/23/15	0029
Chrysene	625	5	< 5	ug/L	CLH	07/23/15	0029
1,2,-Diphenylhydrazine	625	5	< 5	ug/L	CLH	07/23/15	0029
N-nitroso-di-phenylamine	625	5	< 5	ug/L	CLH	07/23/15	0029
Phenanthrene	625	5	< 5	ug/L	CLH	07/23/15	0029
Anthracene	625	5	< 5	ug/L	CLH	07/23/15	0029
di-n-Butyl phthalate	625	5	< 5	ug/L	CLH	07/23/15	0029
Fluoranthene	625	5	< 5	ug/L	CLH	07/23/15	0029
Pyrene	625	5	< 5	ug/L	CLH	07/23/15	0029
Benzidine	625	5	< 5	ug/L	CLH	07/23/15	0029

REPORT OF ANALYSIS

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-10281

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Semi-Volatiles							
Benzo[a]Anthracene	625	5	< 5	ug/L	CLH	07/23/15	0029
Bis(2-chloroethoxy)methane	625	5	< 5	ug/L	CLH	07/23/15	0029
3,3-Dichlorobenzidine	625	5	< 5	ug/L	CLH	07/23/15	0029
Butyl benzyl phthalate	625	5	< 5	ug/L	CLH	07/23/15	0029
N-Nitroso-di-n-propylamine	625	5	< 5	ug/L	CLH	07/23/15	0029
Hexachloroethane	625	5	< 5	ug/L	CLH	07/23/15	0029
1,2,4-Trichlorobenzene	625	5	< 5	ug/L	CLH	07/23/15	0029
Hexachlorobutadiene	625	5	< 5	ug/L	CLH	07/23/15	0029
Hexachlorocyclopentadiene	625	5	< 5	ug/L	CLH	07/23/15	0029
2-Chloronaphthalene	625	5	< 5	ug/L	CLH	07/23/15	0029
Hexachlorobenzene	625	5	< 5	ug/L	CLH	07/23/15	0029
N-Nitrosodimethylamine	625	5	< 5	ug/L	CLH	07/23/15	0029
Acenaphthylene	625	5	< 5	ug/L	CLH	07/23/15	0029
Bis(2-chloroisopropyl) ether	625	5	< 5	ug/L	CLH	07/23/15	0029
2,4-Dinitrotoluene	625	5	< 5	ug/L	CLH	07/23/15	0029
Nitrobenzene	625	5	< 5	ug/L	CLH	07/23/15	0029
Isophorone	625	5	< 5	ug/L	CLH	07/23/15	0029
Benzo[k]Fluoranthene	625	5	< 5	ug/L	CLH	07/23/15	0029
Naphthalene	625	5	< 5	ug/L	CLH	07/23/15	0029
Dimethyl phthalate	625	5	< 5	ug/L	CLH	07/23/15	0029
2,6-Dinitrotoluene	625	5	< 5	ug/L	CLH	07/23/15	0029
Acenaphthene	625	5	< 5	ug/L	CLH	07/23/15	0029
Bis(2-chloroethyl) ether	625	5	< 5	ug/L	CLH	07/23/15	0029
4,6 Dinitro-o-cresol	625	5	< 5	ug/L	CLH	07/23/15	0029
Di-n-Octyl phthalate	625	5	< 5	ug/L	CLH	07/23/15	0029
Bis(2-ethylhexyl) phthalate	625	5	< 5	ug/L	CLH	07/23/15	0029
Pentachlorophenol	625	10	< 10	ug/L	CLH	07/23/15	0029
4-Nitrophenol	625	5	< 5	ug/L	CLH	07/23/15	0029
2,4-Dinitrophenol	625	20	< 20	ug/L	CLH	07/23/15	0029
2,4,6-Trichlorophenol	625	5	< 5	ug/L	CLH	07/23/15	0029
4-Chloro 3-Methylphenol	625	5	< 5	ug/L	CLH	07/23/15	0029
2,4-Dichlorophenol	625	5	< 5	ug/L	CLH	07/23/15	0029
Indeno[1,2,3-c,d]Pyrene	625	5	< 5	ug/L	CLH	07/23/15	0029
2-Nitrophenol	625	5	< 5	ug/L	CLH	07/23/15	0029
Phenol	625	5	< 5	ug/L	CLH	07/23/15	0029
2-Chlorophenol	625	5	< 5	ug/L	CLH	07/23/15	0029
Benzo[g,h,i]Perylene	625	5	< 5	ug/L	CLH	07/23/15	0029
Dibenz[a,h]Anthracene	625	5	< 5	ug/L	CLH	07/23/15	0029
Benzo[a]Pyrene	625	5	< 5	ug/L	CLH	07/23/15	0029
Benzo[b]Fluoranthene	625	5	< 5	ug/L	CLH	07/23/15	0029
2,4-Dimethylphenol	625	5	< 5 CC	ug/L	CLH	07/23/15	0029
Volatiles							
Ethylbenzene	624	5	< 5	ug/L	SDT	07/20/15	1350
Chlorobenzene/Monochlorobenzene	624	5	< 5	ug/L	SDT	07/20/15	1350

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VELAP# 460013
EPA# VA00015

REPORT OF ANALYSIS

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-10281

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time
Volatiles							
Toluene	624	5	< 5	ug/L	SDT	07/20/15	1350
Bromoform	624	5	< 5	ug/L	SDT	07/20/15	1350
1,2-Dichlorobenzene	624	5	< 5	ug/L	SDT	07/20/15	1350
2-Chloroethyl vinyl ether	624	10	< 10	ug/L	SDT	07/20/15	1350
Tetrachloroethene	624	5	< 5	ug/L	SDT	07/20/15	1350
Acrolein	624	50	< 50	ug/L	SDT	07/20/15	1350
trans-1,2-Dichloroethene	624	5	< 5	ug/L	SDT	07/20/15	1350
1,3-Dichloropropene(cis & trans)	624	5	< 5	ug/L	SDT	07/20/15	1350
1,3-Dichlorobenzene	624	5	< 5	ug/L	SDT	07/20/15	1350
1,4-Dichlorobenzene	624	5	< 5	ug/L	SDT	07/20/15	1350
Benzene	624	5	< 5	ug/L	SDT	07/20/15	1350
1,1-Dichloroethane	624	5	< 5	ug/L	SDT	07/20/15	1350
Acrylonitrile	624	50	< 50	ug/L	SDT	07/20/15	1350
1,1,1-Trichloroethane	624	5	< 5	ug/L	SDT	07/20/15	1350
Chloromethane (Methyl Chloride)	624	5	< 5	ug/L	SDT	07/20/15	1350
Bromomethane	624	5	< 5	ug/L	SDT	07/20/15	1350
Vinyl Chloride	624	5	< 5	ug/L	SDT	07/20/15	1350
Chloroethane	624	5	< 5	ug/L	SDT	07/20/15	1350
Methylene Chloride/Dichloromethane	624	5	< 5	ug/L	SDT	07/20/15	1350
1,2-Dichloroethane	624	5	< 5	ug/L	SDT	07/20/15	1350
Chloroform	624	5	< 5	ug/L	SDT	07/20/15	1350
1,1,2-Trichloroethane	624	5	< 5	ug/L	SDT	07/20/15	1350
Carbon Tetrachloride	624	5	< 5	ug/L	SDT	07/20/15	1350
Bromodichloromethane	624	5	< 5	ug/L	SDT	07/20/15	1350
1,1,2,2-Tetrachloroethane	624	5	< 5	ug/L	SDT	07/20/15	1350
1,2-Dichloropropane	624	5	< 5	ug/L	SDT	07/20/15	1350
Trichloroethene	624	5	< 5	ug/L	SDT	07/20/15	1350
Dibromochloromethane	624	5	< 5	ug/L	SDT	07/20/15	1350
1,1-Dichloroethene	624	5	< 5	ug/L	SDT	07/20/15	1350

REPORT OF ANALYSIS

SAMPLE ID: STUARTS DRAFT EFF
SAMPLE NO: 15-10281

Parameter	Method Number	JRA QL	Result	Unit	Analyst	Date	Time

NOTES:

JRA Quantification Level is the concentration of the lowest calibration standard above zero with a reliable signal.

The results on this report relate only to the sample(s) provided for analysis.

Results conform to NELAC standards, where applicable, unless otherwise indicated

*SM 1997

M - Matrix spike % recovery outside acceptance range

CC - Calibration check standard above QC acceptance range, analyte not detected

Authorized By: Elaine Claiborne

Elaine Claiborne, Laboratory Director

Date: 14-Aug-15

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VELAP# 460013
EPA# VA00015